

PRE-SYSTEM QUESTIONNAIRE

Físchlár-DT Experiment for TRECVID 2005, Centre for Digital Video Processing, Dublin City University

► **What is your age?**

- Younger than 20
- 20 – 24
- 25 – 29
- 30 – 34
- 35 – 39
- 40 – 44
- 45 – 49
- Older than 49

► **What is your gender?**

- Male
- Female

► **What is your status?**

- Undergraduate student
- Postgraduate student
- Faculty staff
- Other – please specify:

► **What is your major/specialty and Department/School?**

► **How often do you watch TV news?**

- Seldom
- Less than once a month
- Around once a week
- A few times a week
- Daily

► **How knowledgeable are you with current affairs in general?**

- Not knowledgeable at all
- Not very knowledgeable
- Neutral
- Fairly knowledgeable
- Very knowledgeable

► **How often do you do searching/browsing on the web?**

- Less than once a month
- Average once a week

- Average 2-5 times a week
- Daily

► **What is your experience with a tabletop computer?**

- Never used it
- Once or twice
- A few times
- Regularly (___ Once a year ___ Once a month ___ Once a week ___ Daily)

► **How familiar are you with the system being evaluated?**

- Not at all
- A little
- Fairly
- Quite a bit
- Very much
- I developed it

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
My work/course involves working in groups							
I am a sociable person							
I have a good communication skill							
I am usually well aware of what other people are doing in a group situation							

Thank you very much!

POST-TEST QUESTIONNAIRE

Físchlár-DT Experiment for TRECVID 2005, Centre for Digital Video Processing, Dublin City University

► What is your overall impression about the system?

► Which version of the system do you like better? Dragging-only ____ Contextual menu ____

Why?

► Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
The system is easy to use	Dragging-Only							
	Contextual Menu							
Learning how to use the system was easy	Dragging-Only							
	Contextual Menu							
The system response time was fast enough	Dragging-Only							
	Contextual Menu							
The system interface allowed me to do the task efficiently	Dragging-Only							
	Contextual Menu							
It was easy to be aware of what the other person was doing	Dragging-Only							
	Contextual Menu							

▶ **How was the coordination between you and your partner in searching? (e.g. was your action bothered by your partner's action? Did you by mistake interrupt your partner's action? Did you have to talk to each other for who does what, etc.?)**

▶ **Please add comments on what you liked BEST about each system you used:**

▶ **Please add comments on what you liked WORST about each system you used:**

▶ **Any other comments you want to tell us?**

Thank you very much!

Pop-A-Bubble Questionnaire Responses

► What is your age?

Younger than 20	13
20 – 24	16
25 – 29	7
30 – 34	
35 – 39	
40 – 44	
45 – 49	
Older than 49	

► What is your gender?

Male	33
Female	3

► What is your status?

Undergraduate student	26
Postgraduate student	9
Faculty staff	
Other – please specify:	

► What is your major/specialty and Department/School?

Science & Health	8
Communications	
Computing/Engineering	22
Business	4
Law & Government	2

► What is your experience with a tabletop computer?

Never used it	25
Once or twice	8
A few times	3
Regularly (___ Once a year ___ Once a month ___ Once a week ___ Daily)	

► How familiar are you with the technology being evaluated?

Not at all	19
A little	11
Fairly	3
Quite a bit	2
Very much	1
I developed it	

► How often do you play competitive games on a PC?

Seldom	15
Less than once a month	9
Around once a week	8
A few times a week	2
Daily	2

► How knowledgeable are you with multi-user computerised games?

Not knowledgeable at all	2
Not very knowledgeable	8

Neutral 11
 Fairly knowledgeable 9
 Very knowledgeable 6

► **How familiar are you with the game being evaluated?**

Not at all 24
 A little 7
 Fairly 1
 Quite a bit 3
 Very much 1
 I developed it

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
My work/course involves working in groups	11: 7(E) 4(I)	14: 9(E) 5(I)	7: 3(E) 4(I)	1(I)		1(I)	2: 2(E)
I am a sociable person	7: 5(E) 2(I)	21: 14(E) 7(I)	5: 1(E) 4(I)		1(I)		
I have a good communication skill	4: 3(E) 1(I)	21: 12(E) 9(I)	7: 4(E) 3(I)	1(E)	1(I)		
I am usually well aware of what other people are doing in a group situation	4: 3(E) 1(I)	18: 10(E) 8(I)	9: 6(E) 3(I)	2(I)	1(E)		
I like working in groups	8: 7(E) 1(I)	10: 5(E) 5(I)	9: 5(E) 4(I)	4: 2(E) 2(I)	2(I)		1(E)
I enjoy using new technologies	17: 12(E) 5(I)	15: 7(E) 8(I)	1(I)	1(E)			
I feel confident about using the DiamondTouch	7: 6(E) 1(I)	16: 8(E) 8(I)	9: 4(E) 5(I)	2: 2(E)			
I feel confident about doing this experiment	7: 6(E) 1(I)	21: 11(E) 10(I)	5: 2(E) 3(I)	1(E)			

Pop-A-Bubble Post Responses

► What is your overall impression of the system?

1. P1 Funny game including competitive aspect good combination of computer & self-activity.
P2 Very good.
2. P1 This game is good at testing reaction but the region of touch is a little small.
P2 It's a funny game, and it really tests the person's reaction.
3. P1 Interesting interface, fun, easy to use. Sometimes the DiamondTouch was not very accurate.
P2 Fun. Ability to use any finger of any hand is nice.
4. P1 Confusing, Painful!
P2 Confusing, Violent if played with partner.
5. P1 Responsive, Fun.
6. P1 Great fun, easy to use and allowed people to interact well.
P2 Great fun; nearly lost a finger!
7. P1 Very Good.
P2 Good fun and good for hand-eye coordination.
8. P1 Kickass. A bit simple but fun.
P2 Very entertaining.
9. P1 It's easy to use and fun!
P2 Very enjoyable! A good test of reflexes too.
10. P1 Exciting, brings out a competitive edge in players, requires peripheral vision and good hand/eye coordination.
P2 Exciting but was a bit hard to get used to at first.
11. P1 Good fun; Dodgy response.
P2 Fun, but its appeal didn't last.
12. P1 Easy to use. Needs a good contact from the user to log reaction.
P2 Relatively easy to use, although often failed to pickup what I was doing.
13. P1 Fun for a short while, probably be forgotten about by the end of Christmas day.
P2 Very easy to use, enjoyable.
14. P1 The system is good for training speed.
P2 The game was amusing.
15. P1 Fast-paced, competitive, simple, fun – it's challenging to concentrate on only two colours.
P2 It was fun, very quick, but sometimes me and my opponent got into each other's way.
16. P1 Alright.
P2 Very good.
17. P1 Very fun to use, but fingers hurt after a while.
P2 Nice system.
18. P1 I am better when the score bar is displayed on my side! Some bubbles don't pop.
P2 It's funny and easy to use. You have just to touch the table.

► Which version of the system do you like better? **Single score bar (you control): 4(E) 3(I)** **Single score bar (other person controls): 4(E) 0(I)** **Dual Score bar: 10(E) 9(I)** **Why?**

1. P1 Because noone has an excuse whether it is too slow or too fast (DS).
P2 Both have the possibility to change the speed..... it's fair (DS).
2. P1 Dual Score bar is easy to see for everyone (DS).
P2 I think it's fair to have Dual Score bar, it's easy to see and easy to control (DS).
3. P1 Neither since I found little need to look at the score bar during the game - .
P2 Fair (DS).
4. P1 Nobody has an unfair advantage (DS).
P2 You can see better if you're in the lead. Although it didn't matter too much (DS).
5. P1 You have an advantage over other person (SS(you)).
P2 You can put the other player off (DS).
6. P1 Had control of how fast the bubbles went and it meant that the other person didn't (SS(you)).
P2 I got to mess around with the speed and really control the game (SS(you)).
7. P1 You had control of speed, gave advantage over opponent (SS(you)).
P2 Allows you concentrate (SS(other person)).
8. P1 He worries about trying to fool me. Easier to focus on bubbles(SS(other person))..
P2 Because I had the upper hand... I could adjust the game to my liking.... (SS(you)).

9. P1 I didn't feel the need to control the game and it made no difference to me who was in control. I'd happily have controlled the game but it didn't bother me if my partner was controlling it either (SS(other person)).
P2 The dual-score bar adds an extra element to the game, because the speed could change at any time making it more interesting (DS).
10. P1 It brings an extra edge to the game (DS).
P2 Adds an extra element of competition to the game (DS).
11. P1 More fair; more fun (DS).
P2 Fairer (DS).
12. P1 It meant you were less conscious of how you were doing (SS(other person)).
P2 It seems fairer (DS).
13. P1 More Control. Gives the impression that the game is more fair (DS).
P2 Both people can use & control the system (DS).
14. P2 I didn't really notice any difference.
15. P1 It gives me the (freedom and power) to control and be responsible for my "half" of the game. *at least the impression of having control (DS).
P2 Because it's fair, but I didn't use it much anyway (DS).
16. P1 Everybody should be able to scroll (DS).
P2 Could leave it up to them to decide (SS (other person)).
17. P1 I can change bubble rate to suit me (SS(you)).
P2 Have something that can compare is always better. Feel happy when you win. Have a score bar for each user might be better (DS).
18. P1 When the other was controlling and with the dual bar I felt like all was upside down (SS(you)).
P2 Because you can increase the speed of the game during the party at each side. What is fun. It's you have to control the speed and to pop the balloons (DS).

► Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
The system is easy to use	Single Score	18: 13(E) 5(I)	13: 6(E) 7(I)		1(I)			
	Dual Score	18: 13(E) 5(I)	12: 7(E) 5(I)	2(I)	1(I)			
Learning how to use the system was easy	Single Score	25: 15(E) 10(I)	5: 4(E) 1(I)	2(I)				
	Dual Score	24: 14(E) 10(I)	7: 6(E) 1(I)	2(I)				
The system response time was fast enough	Single Score	9: 7(E) 2(I)	10: 5(E) 5(I)	7: 5(E) 2(I)	2: 1(E) 1(I)	4: 1(E) 3(I)		
	Dual Score	7: 5(E) 2(I)	12: 7(E) 5(I)	8: 6(E) 2(I)	2: 1(E) 1(I)	4: 1(E) 3(I)		
The system interface allowed me to do the task efficiently	Single Score	9: 5(E) 4(I)	16: 13(E) 3(I)	2(I)	2(I)	3: 1(E) 2(I)		
	Dual Score	9: 6(E) 3(I)	16: 13(E) 3(I)	3(I)	2(I)	3: 1(E) 2(I)		
It was easy to be aware of what the other person was doing	Single Score	8: 5(E) 3(I)	8: 5(E) 3(I)	6: 1(E) 5(I)	5: 4(E) 1(I)	4: 3(E) 1(I)	1(E)	
	Dual Score	11: 8(E) 3(I)	7: 3(E) 4(I)	7: 3(E) 4(I)	3: 2(E) 1(I)	3: 2(E) 1(I)	2(E)	

► How was the coordination between you and your partner? (e.g. was your action bothered by your partner's action? Did you by mistake interrupt your partner's action? Did you have to talk to each other for who does what, etc.?)

1. P1 Coordination fine, if over-competitive, hands clashed. Expressed feelings at end of game.
P2 Sometimes our hands were conflicting when trying to hit the same colours. And especially interfering when trying to reach the other side of the table (partner's side).
2. P1 My action was bothered by my partner's, yes we talked to each other.

- P2 I think my action bothered my partner's action, & I did interrupt his action sometime. We also did talk to each other during the game.
3. P1 Little coordination was needed for this task although it was easy to interrupt the other person by getting in their way.
P2 Colliding hands, reaching over the table. No collaborative communicating.
 4. P1 Yes, we kept physically hitting each other's hands.
P2 Fine. There was some interference with shadows over the projector from the other person.
 6. P1 Excellent coordination, at times partner + I clashed hands aiming for the same bubble; No I did everything I wanted to do.
P2 N/A Was deliberately trying to disrupt my "partner's" action.
 7. P1 Yes we did interrupt going for the same bubbles.
P2 Point out which was his colour. He got aggressive.
 8. P1 A little interruption and communication.
P2 A small amount of interference, but nothing unexpected for a game like this one.
 9. P1 It was good. We discussed when we should increase the speed. However we did get in each other's way now and then!
P2 Yes, frequently we interrupted each other's movements, i.e. reaching across each other, knocking into each other.
 10. P1 It became quite ? which added to the competitiveness, and you had to deal with collisions frequently.
P2 We kept getting in each other's way when we were trying to use the system.
 11. P1 A few clashes of hands but overall no real clash.
P2 Yes, yes, yes, lots of playful banter between us.
 12. P1 We didn't speak at all, but just played the game.
P2 Generally, there was some signalling to decide who would start the game. Otherwise we effectively ignored each other's actions.
 13. P1 A few times we knocked each others' hands away by mistake.
P2 On occasion, sometimes our hands caught up trying to pop the same bubble.
 14. P1 My action bothered him, his bothered mine as well. I did a few mistakes and we can't talk to each other during the game.
P2 Yes. On occasion we would reach for opposite sides of the table and block each other's action.
 15. P1 There were little or no clashes between us – it worked well without and spoken agreement.
P2 We got in each other's way when popping the bubbles.
 16. P1 My action was bothered sometimes by his.
P2 Yes we spoke to each other about who had what colour.
 17. P1 Some bumping into each other's arms, but quickly resolved. No need for any talking about what to do.
P2 Sometimes our arms hit each other. I knock at my partner's bubble several times. Yes, we talked a lot.
 18. P1 When he popped many bubbles in a short time, I felt stressed as if I lost already so this made me pop wrong bubbles (his or blue or purple ones).
P2 I'm talking to him when he has his hands on my bubble colours.

►Did you feel comfortable using the system? If not, what aspects of using the system made you feel uncomfortable?

1. P1 Yes, I like it
P2 Uncomfortable (1) sitting position; (2) when trying to reach far away from body/from own side.
2. P1 A little uncomfortable for and too bright for my eyes.
P2 Yes, I feel comfortable using the system. It's easy to understand, and user-friendly.
3. P1 Yes, although it was difficult to get used to.
P2 Quite comfortable. It appeared unable to recognise multiple fingers at once, leading to missed "clicks".
4. P1 Yes.
P2 Yes it was fine.
5. P1 Yes.
P2 Yes.
6. P1 Feel comfortable.
P2 Yes.
7. P1 Yes.
P2 Yes.
8. P1 Mostly comfortable, although my back is a little sore from hunching over this..... thingy.
P2 Yes.
9. P1 Yes.
P2 Yes the system is very easy to use and manipulate.
10. P1 Yes.
P2 Yes.

11. P1 Far reach a bit awkward. Slight tingle if touching the screen for a while.
P2 Yes.
12. P1 I felt fine using the system; it was simple to understand and use.
P2 The colour, otherwise it was fine.
13. P1 I felt very comfortable.
P2 Very comfortable, as it was so easy to me.
14. P1 Yes.
P2 Yes.
15. P1 Mostly – the table height is quite awkward to use when sitting. I kept having to reach over so far.
P2 Quite, it was only hard to reach for bubbles at the far side of the screen.
16. P1 I did.
P2 Yes.
17. P1 Mostly comfortable, but fingers can hurt after long play times.
P2 Quite good system. The shadow of my head block the projector when I want to reach the other end of the board.
18. P1 Sometimes bubbles don't pop.
P2 Yes, I'm feeling good.

►Did you find yourself improving as you used the system?

1. P1 At first, increase in my score, later on I got a bit tired, honestly.
P2 No, from beginning I felt v. comfortable to play the game. Concentration reduced, got a little bit tired.
2. P1 No just improve the skill for this game.
P2 Not really.
3. P1 Yes.
P2 Yes.
4. P1 Yes.
P2 No, not when changing sides.
5. P1 No.
P2 Yes.
6. P1 Yes!
P2 Yes.
7. P1 Yes, but he improved more than me!
P2 Yes.
8. P1 Yes.
P2 Yes.
9. P1 Yes I did however I found it easier to stick with my original colour (orange) and I did not do too well when I switched to yellow.
P2 Reaction time decreased as I got more familiar with the system.
10. P1 Yes.
P2 Not in this session, but given a bit more time on it, I think that I could.
11. P1 Slightly.
P2 Yes, but the program was a little basic, so most of the improvement regarded improved communication i.e. touching the pad in a more efficient way.
12. P1 I am not sure; I did notice scores between 17-53 but I think I stayed about the same.
P2 Yes, albeit marginally.
13. P1 Yes my reaction time shortenend.
P2 Yes even by judging the scores, I know that I improved as I went along.
14. P1 Yes a little bit.
P2 A little bit.
15. P1 Yes, although I'm certain that the connection on the second pad was better than the first.
P2 Yes.
16. P1 A bit.
P2 Yes.
17. P1 Yes. Hand/eye coordination got better as time went by.
P2 Not really.
18. P1 While I had single bar my side, yes.
P2 Yes, at the beginning we saw only a part of the table and only used one hand and at the end I tried to use both my hands and to see all the table.

► Please add comments on what you liked BEST about each version of the system you used:

1. P1 Activity, further that there were 2 players
2. P1 I like the Dual Score bar better, I like the freedom.

- P2 The version with Dual Control bar is the one I like most. Both can take control of the speed of the game, it's fair.
3. P1 Didn't notice any difference between the versions, except not accidentally hitting the X or the Slider when the control bar was on the opposite side.
 5. P1 Single Score Bar: Less Distraction, Dual: One person does not have advantage.
P2 Easy to Use, Fun.
 6. P1 Liked the fact that you have increase and decrease speed.
P2 Loved the control of having the speed bar myself.
 7. P1 Single Score – allowed control for one person – good fun; Dual Score – Both on equal footing.
P2 The way you could increase or decrease the speed, liked the change-over. Hard to concentrate on a new colour.
 8. P1 Weird touchscreen competitiveness.
P2 Single -> You had complete control over speed. Both -> you could alter the speed if the opponent felt it necessary to move.
 9. P1 I liked the system as it was easy to use and also fun to engage with.
P2 There was very little difference between the two systems, before each session we agreed on a speed and this didn't change throughout each game. The element of competition was enjoyable.
 10. P1 When I controlled the single score I tried using the speed to my advantage which was aspect I liked, and obviously disliked when reversed. In the dual score, the game speed varied so much and I really enjoyed that for the challenge.
P2 The change of colour (yellow/orange) meant that you really have to concentrate on what you are doing and the other colours in the game also meant that you had to focus on the game.
 11. P1 Single Control: less change in pace of game. More controlled throughout. Dual Control: A bit more fun; more fair.
P2 I like the short length of the games. Very little preference between the versions, but could see potential as hand-eye coordination tool.
 12. P1 I didn't notice much of a difference in the systems.
P2. Single: Looks more uncluttered without the two bars, bubbles appear behind the bars. Dual: Seems fairer.
 13. P1 The dual bar was better because each player has equal control over the speed of the game.
P2 Firstly there wasn't that much of a difference between the 2 versions, however I did find the competitiveness the best and most enjoyable part.
 14. P1 The first one wasn't good for me, it makes me feel uncomfortable. The second one gives me better feeling.
P2 I noticed very little difference between them, so I have no comment.
 15. P1 The single score panel made the interface seem less cluttered. I like that. What I liked about the dual panel interface was that the writing was facing me and that made it readable. Reading upside down is hard.
P2 The versions didn't have any difference. I liked the challenge and the game was fun and easy.
 16. P1 Changing the speed.
P2 Both could change the speed on dual. There was no mis-communication on the single.
 17. P1 With single score on my side, I can control the rate of bubbles to suit me. With single score on opponent's side it wasn't in the way of bubbles close to me.
P2 Did not even notice there were 2 versions.
 18. P1 With the single bar I felt like I was on the good side of the tabletop.
P2 Dual Score: You can increase the speed to disturb the other player. Both: Easy to use, it's seem to be easy to play with yellow colour.

► **Please add comments on what you DISLIKED MOST about each version of the system you used:**

1. P1 No difficulties.
2. P1 The Single Score bar controlled by other person, it made me feel I am controlled by others.
P2 There is none that I dislike most. For me all the versions of the systems are pretty similar and we don't really have a time to adjust the speed or watch score during the game.
3. P2 No time for reading the score – needs some other way of communicating the score status.
5. P1 Dual: Doesn't have advantage.
P2 Sometimes slow on touch screen.
6. P1 Disliked the fact that one person could control the system and the other person couldn't. Also – yellow + orange are very close and it's hard to swap and use other colour.
P2 Getting stabbed by nails.
7. P1 Dual Score – didn't realise I could control it. Overall very happy, No dislikes.
P2 Sometimes slow on touchscreen.
8. P1 It would not work from time to time.
P2 Single/both -> the response time for the program felt a little (iffy), where it would work fine for one moment, but adjust itself to another setting later.
9. P1 Sometimes we got in each other's way whilst trying to pop the bubbles.

- P2 There was nothing to dislike, it was very user-friendly and fun to use.
10. P1 On occasion you needed 2 or even 3 strikes to burst a balloon which was at times was frustrating. Also when the speed was at it's slowest there were periods when no yellows, oranges or purples came out.
P2 Getting in each other's way while trying to use the system and when the game was set to high/fast, it was hard to cope with what was happening.
11. P1 Lack of control if using single control system and not in the driver's seat. Other person's interest of control of how the system works may clash if they can control as well.
P2 The game became tedious i.e. no strategy at all.
12. P1 The top-down projection was obscured by our hands as we played.
P2 Single: Seems unfair that I control while he doesn't. Dual: Bubbles tend to appear behind people's bars.
13. P1 The single bar was unfair.
P2 Didn't really dislike anything about either system.
14. P2 Same as above.
15. P1 Reading upside down. I also had the impression that the diamondtouch sometimes didn't react to me touching it. The score panels colours matched the balloon colours except the slider. The slider should be a neutral colour and not a balloon colour – it's confusing. The "winner" text and the "Start Game" button had writing facing only one way – it made the game seem biased towards a single player. More difficult to concentrate on orange and cyan than yellow and cyan.
P2 That we were getting in each other's way. More difficult to concentrate on orange and cyan than yellow and cyan.
16. P1 Nothing.
P2 Other person had to ask to increase the speed on single.
17. P1 Nothing particularly disliked.
P2 Not much difference for me.
18. P1 I disliked seeing the text upside-down.
P2 Both: The scrollbar is "hard" to move easily; We saw our shadows on the table.

► **Any other comments you want to tell us?**

1. P2 Sitting position
2. P1 I think the equipment installing is a problem because the projector must be fixed and adjust for the touchtable.
P2 I think there no much difference between each version of the system, so no need to display the Score bar and speed bar when game starts. Because people are normally concentrate on the game and no time to think something else (e.g. speed, score so far...).
6. P1 Great experiment
7. P1 System was very good. Enjoyable. Game was quite simple but easy to get into. Brought out my competitive streak even though I lost.
P2 Good fun because I destroyed him 17 – 1. Easy, easy, easy.
8. P1 This brought out my competitive side, even though I'm not competitive.... But it was fun!
P2 The game was quite an entertaining experience. Well worth a half an hour from any person's day (with a friend).
9. P1 I think she cheated!
10. P1 The game and concept is fun, exciting and captivating, but aggressive players could lose the run of themselves.
11. P1 Not really.
P2 Would be deadly in the pub! ;p
15. P1 Other than that a balloon disappears when popped, feedback of having popped the balloon would be nice. As in 2 different types of click sounds – one for each player.

Thank you very much!

Pre CollabMemory Game Responses

► **What is your age?**

- Younger than 20 12
- 20 – 24 17
- 25 – 29 7
- 30 – 34
- 35 – 39
- 40 – 44
- 45 – 49
- Older than 49

► **How often to you work cooperatively on a task with other people using a PC?**

- Seldom 14
- Less than once a month 6
- Around once a week 9
- A few times a week 5
- Daily 2

► **How knowledgeable are you with multi-user computerised games?**

- Not knowledgeable at all 2
- Not very knowledgeable 6
- Neutral 14
- Fairly knowledgeable 7
- Very knowledgeable 7

► **How familiar are you with the system being evaluated?**

- Not at all 9
- A little 10
- Fairly 9
- Quite a bit 7
- Very much 1
- I developed it

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
My work/course involves working in groups	11	12	2	1	3	2	1
I am usually well aware of what other people are doing in a group situation	5	16	8	5			
I like working in groups	6	10	9	4	3	1	1
I enjoy using new technologies	19	13	2				
I feel confident about using the DiamondTouch	13	15	5	1			
I feel confident using this system	12	17	3	2			

Thank you very much!

Post CollabMemory Responses

► What is your overall impression of the system (game) you have used?

1. P2 I liked it very much.
2. P1 The design of the game is great. The system can distinguish different people. The sensitivity of touch sensor is very good.
P2 Some games are hard, and others are easy. Those games are really testing people's short memory. If people had good start at the beginning of the games they will do well until the end.
3. P1 Easy to use, fun, easier than the previous (bubbles) game. Intuitive Interface.
P2 Quirky, Mildly frustrating.
4. P1 Challenging objectives, Easy interface.
P2 Fun, easy to use.
5. P1 It is responsive, works well and fun.
P2 It goes.
6. P1 Great game, got you thinking.
P2 Good fun.
7. P1 Very good. Allows players to co-operate and rely on each other to help out.
P2 Would help develop memory.
8. P1 A little bit basic, but fun nonetheless. Maybe not as hectic as the first game (bubbles) but more thought required.
P2 Very entertaining ☺ Added a new 'light' on what I might have considered a solo playing game.
9. P1 I thought it was enjoyable and also easy to operate.
P2 An interesting challenge and a good test of memory and speed.
10. P2 It's an interesting way of playing an ordinary card game.
11. P1 Enjoyable, Cooperative, Entertaining.
P2 Fun to work together on, but a little short-lived.
12. P1 I enjoyed using the system.
13. P1 Fun, good use of team work.
P2 Fairly easy to use. Very team motivated.
14. P1 It's easy to use.
15. P1 Enjoyable ☺.
P2 I liked it.
16. P1 Some faults, but alright.
P2 Very interesting game, a bit buggy.
17. P1 Quite fun, but it could be improved with different game modes.
P2 Nice interface and easy to use.
18. P1 The easier part was the fruits. Then it was complicated with the signs. And it was very hard with the cards.
P2 It's an hard game because you have to memorize the cards' place. The hardest it's with the game cards (playing?!)

► Which version of the system do you like better?

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
I liked these systems	Accuracy Dependent	9	14	8	2			
	Speed Dependent	9	15	4	3	1	1	

Why?

1. P1 Because everything worked fine, just little technical problems if we went too fast. Environmentally friendly because you needn't produce the deck of cards. On the other hand, I like to turn around material – cards (more human) (both QA).

P2 No need for shuffling. System records best times, best results. More cooperative games are possible on the DT in contrast to the PC. There is still a personal interaction with partner (both SA).

2. P1 Natural interaction between human and machines is a challenge. This system realizes an approach for human-interaction. But I have not ideas about how to use this approach to deal with real problems and applications (both N).

P2 (1 ALA, 2 SA)

3. P1 Simple clear interfaces easy to understand game (1 LA, 2 LD).

P2 The time pressure removes most of the fun (1 QA, 2 N).

4. P1 Accuracy with cards of different suits very difficult (1 N, 2 QA).

P2 (1 QA, 2 QA).

5. P1 Completed in error. Correction is (1 SA, 2 QA)

P2 More incentive to cooperate in speed dependent system (1 LA, 2 QA).

6. P1 Required concentration and collaboration with other member (1 SA, 2 SA).

P2 I thought havng more a chance to discuss the choices was better (1 SA, 2 QA).

7. P1 (1 LA, 2 SA).

P2 Speed made it seem more competitive (1QA, 1 SA).

8. P1 Team-based game, which I like more than the competitive games (1 SA, 1 QA).

P2 You were relying on the system to keep up with the player..... but the touch sensitivity wasn't good enough to allow this. The accuracy game was good because the system was well able to keep up and more thought (1 SA, 2N).

9. P1 (1 QA, 2 QA).

P2 I liked the Accuracy-dependent game because it required good memory skills, whereas the speed game required less thought (1 SA, 2 QA).

10. P1 Very challenging mentally, requires plenty of skill to remember the location of the cards and good communication between partners. Working together brings a fun element, which competition might over shadow (1 SA, 2 SA,).

P2 It's more challenging than the trial and error of the speed game (1 SA, 2 QA).

11. P1 Challenging, but not so much that it took away from the games (1 QA, 2 QA).

P2 It allows greater user-computer, computer-user interactivity (1 LA, 1 LA).

12. P1 (1 QA, 2 SA).

P2 (1 QA, 1 QD).

13. P1 They respond quickly with little error (1 QA, 2 QA) .

P2 Both were quite enjoyable (1 LA, 2 LA).

14. P1 I feel comfortable with the Accuracy dependent (1 QA, 2 LA).

P2 More fun (speed dependent) (1 QA, 2 SA).

15. P1 I felt it was more challenging (1 SA, 2 LA).

P2 I could concentrate on memorizing the cards (1 QA, 1 LA).

16. P1 It was fun (1 QA, 1 QA).

P2 (1 QA, 1 SA).

17. P1 Harder to remember cards when playing the speed-dependent version (1 QA, 2 LA).

P2 (1 LA, 2 QA).

18. P1 With the speed dependence, we had less time to watch the cards, so it's hard to remember and I wasn't really aware of what my partner was doing (1 SA, 2 QA).

P2 Because we have to improve ours speed and memorized the cards in the same time (1 LA, 2 QA).

► Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
I felt comfortable with the rules of the system	Accuracy Dependent	20	12	1				
	Speed Dependent	19	11	1	1	1		
Learning how to use the system was easy	Accuracy Dependent	25	8					

	Speed Dependent	24	9					
The system interface allowed me to do the task efficiently	Accuracy Dependent	17	9	5	1		1	
	Speed Dependent	11	12	6	2	1	1	
It was easy to be aware of what the other person was doing	Accuracy Dependent	13	13	4	1	2		
	Speed Dependent	13	9	4	4	1	2	
I liked the layout of the game/interface.	Accuracy Dependent	16	15	1		1		
	Speed Dependent	16	15	1		1		
I felt comfortable working with my partner	Accuracy Dependent	21	9	3				
	Speed Dependent	20	11		1			1
I liked working with my partner	Accuracy Dependent	20	9	2		1		
	Speed Dependent	20	11			1		
I found myself improving as I used the system		12	9	5	5		1	

► How was the coordination between you and your partner in searching? (e.g. was your action bothered by your partner's action? Did you by mistake interrupt your partner's action? Did you have to talk to each other for who does what, etc.?)

1. P1 We harmonised very good, yes we used communication skills to achieve best results.
P2 My partner always tried to click 2 cards in arrow (the opening one card and matching one). Luckily the system recognised that it was my turn. Although sometimes the system seemed to be confused.
2. P1 My partner's action did not bothered mine. We always talked to each other.
P2 We did this task as a team. Before experiments begin, we separate the task into sub-tasks to each other and often talk to each other during the experiments.
3. P1 Coordination was quite simple, talking through which cards to pick.
P2 No collisions, mostly verbal communication for hints and suggestions, some pointing.
4. P1 Yes, we talked. Coordination was decent, but not practised enough.
P2 Yes, communication is important particularly when the interface is problematic. Coordination was fine. When he made mistakes, it was annoying.
5. P1 We helped each other by talking about which cards to go for.
P2 Generally no, talked a little.
6. P1 We had to communicate with each other to get cards to match. Was good game.
P2 It helped having a partner as long as I felt I could trust what they did.
7. P1 No it was not bothered. We talked and made suggestions to the other person.
P2 Didn't talk as much as we should have but we were observing each other's selections.
8. P1 Talking, pointing and other basic forms of communication were necessary to prevent my partner from making even more mistakes! But we both seemed to have the same strategy from the beginning i.e. starting in one corner and working across.
P2 "Communication" I feel was definitely vital to the success of the game! While it was tricky in the beginning to fully realise what was involved the cooperation take on the game was entertaining.
9. P1 Our coordination was good. We were able to communicate with each other as to how to go about the task.
P2 We cooperated to decide which square to touch which resulted in more efficient games.
11. P1 Some talking was necessary in order to communicate the pairs that each person had noticed. But no my action was not bothered by my partner's.
P2 We helped each other throughout, pointing towards particular cards, joked, etc
12. P1 We worked out a system of how to work out the cards and stuck to it. It involved going row by row and remembering the cards that came up.

P2 We talked to set up a system & so to spread the things that have to be remembered. He was stupidly slow though.

13. P1 We talked with each other and as we swapped player 1 position regularly, we could both take turns being in charge and giving orders.

P2 Spoke when needed i.e. pointed to corresponding boxes.

14. P1 Our action didn't bother each other. By working together, we did make so much mistake, but we have to talk to each other during the game.

P2 Sometimes we suggested matches to each other. Sometimes we would forget if the other player had already made their move.

15. P1 It was naturally coordinated without spoken or prior agreement.

P2 We advised each other, I wasn't bothered by my partner's actions at all.

16. P1 We talked a bit.

P2 We talked to each other & I pointed out where we saw matches.

17. P1 Coordination was ok. We'd both remember some cards and point out to the other if we knew where one was. Sometimes it's easy to forget if it's your go first.

P2 We do not have a rule, just doing it. We could do better if we had good coordination.

18. P1 We talked to help each other. We didn't bother each other except in the speed dependent version when I was Player 2 he didn't let enough time to remember the cards.

P2 I'm looking for a sign when I was the master because I want he has the time to memorize the card. When I was the "slave", if I knew the card place, I played and if not I tried a new card or a card I thought know the second (not exactly).

► Any other comments you want to tell us?

1. P1 It was a pleasure☺

2. P2 The easy game could make people happy and tell more confidence and help people to remember more, The hard game could make people reduce memory level. At the beginning of each game, if people are doing ok in a first couple of seconds, normally people will keep doing quite well until the end. Otherwise, it will be getting worse.

3. P2 (drew picture).

6. P2 Tell me the fastest time!

9. P2 The touch system could be more sensitive.

11. P1 If an upturned card was pressed for a second time, it didn't respond correctly.

12. P1 The playing cards were the most difficult to work with.

17. P1 Game would seem a little better if bugs were removed i.e. cards not turning over when they should. Had to tap repeatedly sometimes for the card to turn over.

P2 The interface is very friendly and easy to use. The touchboard is not too good. I have to touch it several times for one action.

Thank you very much!

CompMemory Pre Responses

► **How often to you play competitive games on a PC?**

- Seldom 13
- Less than once a month 9
- Around once a week 7
- A few times a week 5
- Daily 2

► **How knowledgeable are you with multi-user computerised games?**

- Not knowledgeable at all 1
- Not very knowledgeable 5
- Neutral 11
- Fairly knowledgeable 14
- Very knowledgeable 5

► **How familiar are you with the system being evaluated?**

- Not at all 4
- A little 6
- Fairly 12
- Quite a bit 12
- Very much 2
- I developed it

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
I am usually well aware of what other people are doing in a group situation	3(E)	18: 10(E) 8(I)	12: 8(E) 4(I)	2(I)			
I like working in groups	7(E)	10: 5(E) 5(I)	11: 3(E) 8(I)	3: 2(E) 1(I)	2(E)	1(E)	1(E)
I enjoy using new technologies	20: 12(E) 8(I)	11: 8(E) 3(I)	3: 1(E) 2(I)	1(I)			
I feel confident about using the DiamondTouch	15: 10(E) 5(I)	17: 11(E) 6(I)	3(I)				
I feel confident using this system	14: 9(E) 5(I)	17: 11(E) 6(I)	3(I)	1(I)			

Thank you very much!

Competitive Memory Post Responses

► **What is your overall impression of the system (game) you have used?**

1. P1 It is a nice game with a nice new feature “hint”. Computer as Interactor. On the other hand this could lead that one party has more choices.
P2 Very good.
2. P1 Very interesting
P2 I was aware of what my partner was doing during the experiments and got kind of help from the system.
3. P1 A little buggy but very intuitive and easy to use
P2 Buggy, unpredictable.
4. P1 Easy to use and challenging (without hints on).
5. P2 Enjoyable, easy to use.
6. P1 It’s good.
P2 A little buggy but good. Too truthful.
7. P1 Very good. Competition helps you remember cards opponent has turned.
P2 Very good for memory, concentration while still being competitive and fun.
8. P1 Not too bad, a little basic but still mentally stimulating.
P2 Entertaining!
9. P1 It was enjoyable and easy to use.
P2 Glitches aside, it is interesting to play.
10. P1 I enjoyed the challenge of the game and the use of the interface. It gave the game less of a computer game feel to play without a joystick/control pad.
P2 A bit of a laugh even though it was a draw.
11. P1 Fun because of it’s easy playability and competitive structure.
13. P1 Fun.
P2 Enjoyed using this game a little, but mostly found it quite hard.
14. P2 A good game.
15. P1 Somewhat more strategic than original “memory”.
P2 It’s easy to use and quite fun.
17. P1 A bit of fun, easy to use, but can be too helpful with the hints.
P2 Nice game. I enjoyed it very much.
18. P1 It’s very nice to play with hints, I liked that.
P2 It’s harder than the first similar game because you have to choose the card underlined. It’s harder to use a memory technique.

► **Which version did you prefer?**

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
I liked this system	With Hints Button	7: 6(E) 1(I)	13: 7(E) 6(I)	6: 2(E) 4(I)	6: 3(E) 3(I)	1(I)		1(E)
	Without Hints Button	11: 7(E) 4(I)	9: 4(E) 5(I)	4: 3(E) 1(I)	4: 2(E) 2(I)	2: 1(E) 1(I)	1(E)	

Why?

1. P1 Because I like memory (+h QA, -h SA).
P2 I liked both versions. The version with hints was very interesting as it added some new strategic point to the game (+h SA, -h SA).
2. P1 I can have more one selection to hint the true I know and my thought I will do next step (+h N, -h QA).
P2 It will narrow the options automatically rather than pressing the Hints button every time (-h SA).
3. P1 (+h QA, -h QA).

- P2 Hints are distracting, and the confidence level means little (+h QA, -h LA).
4. P1 Hints make it a bit too easy (+h QA, -h LD).
P2 Made it fairer. Was less of a challenge with hints (+h SA, -h QD).
 5. P1 Less distracting (+h LA, -h N).
P2 Initially the hints were distracting (+h QA, -h LA).
 6. P1 With hints button was a bit messy as in you weren't sure if it would get hints on the button/card you had selected if it was already turned up. Without hints button was fast and easy to use (+h N, -h SA).
P2 I didn't like the hints because they were too correct. At the end of the game, the 'clue/hint' was too often the answer.
 7. P1 Without hints more challenging (+h QA, -h SA).
P2 Hints added more of a chance in guessing (+h SA, -h QA).
 8. P1 Because James was too stupid to realise the highlighted button the second time around, so it was to my favour. Hinting put a little less pressure off the mind, more down to probability (+h QA, -h SA).
P2 Towards the end it told where the remaining matches were!! (+h N, -h QA).
 9. P1 The hint buttons narrowed down your options, therefore I preferred them (+h LA, -h SA).
P2 If you are trailing behind in the game, the hints button is a useful handicap on the other player.
However, it is a fairer test of memory it (+h QA, -h SA).
 10. P1 I found that the automatic hints were more of a hinderance than a help, they often clouded my judgement, I found it harder to remember locations with them. Also towards the end of each round, it became next to impossible to make a wrong choice with the automatic hints (+h SA, -h N).
P2 I preferred the game that didn't give hints because it was more of a challenge to remember where the cards were.
 11. P1 Hints button does seem slightly pointless without any risk factor/penalty involved in using it (+h N, -h QA).
P2 (+h SD, -h N).
 12. P1 It just felt a little easier to think with the button (+h LA).
P2 (+h LS, -h QA).
 13. P1 Towards the end of the game, the hints ensure whoever is in the lead wins almost every time (+h SA, -h QA).
P2 The system with hints was obviously easier to use (+h LD, -h N).
 14. P1 With hints can be used for truly training on brain. With automatic hints is a way to be played easily (+h QA, -h N).
P2 Automatic hints were not good if you wanted to play a difficult game (+h SA, -h QA).
 15. P1 It allowed me to concentrate on the game and on the strategy at hand (+h N, -h SA).
P2 Automatic was better because I didn't have to touch the button every time (+h LA, -h QA).
 16. P1 (1 N, 2 QA).
 17. P1 I preferred the hints button because it was distracting sometimes with the automatic hints (+h QA, -h LA).
P2 I prefer the hints button rather than the automatic one. It gives you the information only when you need it (1 SA).
 18. P1 At the beginning of the game, without hints, you have no chance to find the match so it's not very exciting whereas with the hints, even at the beginning you have a chance to find a match, so it's more interesting (1 QA, 1 SA).
P2 (1 QA, 1 LA).

► Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
The system is easy to use	With Hints Button	17: 14(E) 3(I)	13: 5(E) 8(I)	4(I)				
	Without Hints Button	21: 15(E) 6(I)	9: 3(E) 6(I)	5: 2(E) 3(I)				
Learning how to use the system was easy	With Hints Button	22: 16(E) 6(I)	10: 2(E) 8(I)	2: 1(E) 1(I)		1(E)		
	Without Hints Button	24: 17(E) 7(I)	9: 3(E) 6(I)	2(I)				

The system response time was fast enough	With Hints Button	22: 15(E) 7(I)	9: 4(E) 5(I)	1(E)	1(I)	2(I)		
	Without Hints Button	22: 15(E) 7(I)	9: 4(E) 5(I)	1(E)	1(I)	2(I)		
The system interface allowed me to do the task efficiently	With Hints Button	17: 14(E) 3(I)	12: 4(E) 8(I)	4: 1(E) 3(I)	1(I)	1(E)		
	Without Hints Button	20: 15(E) 5(I)	10: 5(E) 5(I)	4: 1(E) 3(I)	1(I)			
It was easy to be aware of what the other person was doing	With Hints Button	23: 16(E) 7(I)	10: 4(E) 6(I)	2: 1(E) 1(I)		1(E)		
	Without Hints Button	22: 16(E) 6(I)	7: 2(E) 5(I)	5: 2(E) 3(I)		1(I)		
I liked the layout of the game/interface. (Colours used, etc)	With Hints Button	14: 10(E) 4(I)	10: 4(E) 6(I)	7: 4(E) 3(I)	3: 1(E) 2(I)			1(E)
	Without Hints Button	10: 7(E) 3(I)	8: 4(E) 4(I)	7: 5(E) 2(I)	4: 1(E) 3(I)	4: 1(E) 3(I)	2: 1(E) 1(I)	1(E)
I liked competing against the other person.	With Hints Button	13: 9(E) 4(I)	11: 3(E) 8(I)	7: 4(E) 3(I)		1(E)		1(E)
	Without Hints Button	13: 9(E) 4(I)	10: 3(E) 7(I)	8: 4(E) 4(I)	2(E)			
I felt comfortable using the system		18: 10(E) 8(I)	11: 8(E) 3(I)	3(I)	2: 1(E) 1(I)	1(E)		
I found myself improving as I used the system		8: 5(E) 3(I)	9: 6(E) 3(I)	10: 5(E) 5(I)	4: 1(E) 3(I)	1(E)		1(E)

6. P1 Colours of without hints too loud.

► **How was the coordination between you and your partner in searching? (e.g. was your action bothered by your partner's action? Did you by mistake interrupt your partner's action? Did you have to talk to each other for who does what, etc.?)**

1. P1 There isn't any cooperation.
P2 No cooperation or coordination was needed for this game.
2. P1 We did not bother each other. Yes we talked to each other sometimes.
P2 We did it on its own, and didn't bother each other.
3. P1 Was confused once or twice about whose turn it was, but otherwise it was fine.
P2 Occasional Interrupts.
4. P1 Coordination was easy. Partner was nearby and I could clearly see what she was doing, Sometimes we would both reach for the same card on impulse, even if it wasn't my/her turn.
P2 Sometimes I thought it was my turn when it was still his but I was just confused.
5. P1 By mistake interrupted partner's action.
P2 There was no problem with coordination.
6. P1 Made mistake of going to hit other partner's card for me; made mistake of waiting for partner to pick card.
P2 Reasonable with few errors.
7. P1 Fine. We did not interfere with each other.
P2 Only when the card flicked over by itself cause it wasn't a match.
8. P1 Without mistake in helped my opponent's action, talking made it more enjoyable.
P2 Coordination was simplistic and was unhindered by the other player. The only time that communication was necessary was when you gloated after winning a round, hurray!
9. P1 The coordination was good and we did not interfere with each other's actions except for when It came to taking turns which proved a little confusing.
P2 Apart from sometimes impulsive stabbing at the table, we did not get in each other's way.
11. P1 No real clashes in interaction apart from occasionally forgetting whose turn it was.
P2 Well the game was competitive, but we did give hints to each other anyway, every once in a while we interrupted each other's turn, clearer turn indication is needed.
12. P1 We tried to memorise what the other had done so as to get a better result.
P2 Very little talking to one another, but we did note one another's actions.
13. P1 At first I forgot to pick 2 cards at a time because last week we were working together. I took note of the cards he picked (and didn't pick esp. in the "with hints game").

- P2 No we didn't talk really, as we were competing.
14. P1 No bothered each other.
P2 No, because we did actions in turn, unlike bubble popping game, action was not bothered.
15. P1 No interaction necessary – each tried to take advantage of the other's moves (and mistakes!).
P2 There was no coordination except for watching what my partner uncovered.
16. P1 Everything was alright, no bothering, not talking.
P2 I was able to use the hints my partner got to find cards on my turn.
17. P1 Only slight confusion at the start of new games about who should go first.
P2 We against each other and we take turns so we do not bother each other at all.
18. P1 No coordination nor interaction.

► **Please add comments on what you liked BEST about each system you used:**

1. P1 With hints: easier to remember. Without hints: the game was fairer.
P2
2. P1 For the hardware, I like its sensitivity. For the software I played, I think it is very interesting.
P2 I like the one without Hints buttons. Because it's automatically.
3. P1 Liked the fact that the hints could be shown only when requested.
P2 With hints: Only when I asked for them.
4. P1 Without hints: Challenging. With hints: made hardest game (cards plus suits) easier!!
P2 I like no hints. It was just fairer and more enjoyable that way. The hints only helped if you were at a disadvantage it seemed.
5. P1 With button: less distracting
P2 Ease of use, simplicity.
6. P1 System 1: Colours; System 2: Automatic Hinting
P2 The hints were handy at times.
7. P1 It was easy to use and a good test of memory.
P2 Liked the hint option, allowed guessing.
8. P1 The technology?
P2 No hints -> added more restraint on the player to remember! Hints -> very easy.
9. P1 The hints buttons made the system easier to use. The cards were bright and easy to see.
P2 I enjoyed doing it as it was challenging. The hints are useful if you are behind, but they also benefit the other player.
11. P1 Without hints button, it required a lot more attention and so rewarded the more avid gamer. With hints button, it made the game a bit more enjoyable by levelling the playing field by that little bit.
P2 Best Without button: It was fair and balanced. Best with button: I was sitting down.
12. P1 The system's interface was fine but the colours of the second system were offputting (-h).
P2 The colour scheme on the first one. How confident the second one was.
13. P1 Without hints: You have to rely on your own memory. With hints: It eliminates some of the guess-work and made it easier.
P2 Somewhat enjoyed the hint system as it was a lot easier to use.
15. P1 I liked that you could choose to play without hints on the manual one. With hints automatically enabled, it made for a very smooth playing experience.
16. P1 Simple to use.
P2 Didn't have to press hints for automatic system. Hints helped the game a lot.
17. P1 With the hints button, I could turn them over after I worked out where the match might be, to help further.
P2 Like the hints button. When you do not know what to do, it gives you some information.
18. P1 I liked the automatic hints because the hints button I always pressed it so with the automatic hints I didn't have to press. In the hints button version, I preferred the layout of the cards and the background.
P2 First: the hint system, the colours used.

► **Please add comments on what you DISLIKED MOST about each system you used:**

1. P1 No complaints.
P2 ?
2. P1 No comments about this.

- P2 It would be the one with Hints buttons. Because you have to do it by yourself.
3. P1 The box which told how accurate the hint was. I found myself ignoring it (and losing!).
P2 Automatic hints are distracting and can only make one doubt one's choice.
 4. P1 Without hints: Cards plus suits very difficult. With hints: makes other games a bit too simple.
P2 Refer to previous answer! I didn't dislike anything about the non-hints version.
 5. P1 Without button: Can always see partner's hints.
P2 The glitch that turned over the cards by mistake.
 6. P1 System 1: Having to hint myself. System 2: Colours very much so.
P2 Too truthful. Not enough of a gamble involved.
 7. P1 The hints button made it too easy towards the end when there were only a few pairs left.
P2 When the card flicked over and back too fast.
 8. P1 A little primitive.
P2 No hints -> eh? It's cards! 'solitaire'. Hints -> The system lead my hand towards the end!
 9. P1 At times the system was a little confusing, such as some cards remained turned over for some reason. Also I found the game with the deck of cards most challenging.
P2 The occasional glitches.
 11. P1 Without hints button, nothing really. It just increased in difficulty when using the actual playing cards. With hints button, some players don't seem too bothered to use it, whereas others constantly use it.
P2 We were using the same screen, accusing conflicts, the hints removed all challenge from the game, the button was a pain to toggle, I got fed up very quickly, no point in having a button if you ask me, I mean pairs is bad enough.
 12. P1 The colour scheme of the 2nd game (-h).
P2 The colour scheme of the second one (-h).
 13. P1 With hints: At first I forgot where the cards were when the cards became highlighted and then turned back. I became kind of distorted.
P2 I just dislike memory-based games, basically I am not great at them.
 14. P2 The automatic hints.
 16. P2 Hints made too easy for the other player at times. I had to keep pressing the hints button.
 17. P1 Hints were too helpful at the end stage of the game when there were only a few cards left.
P2 At the last of the game, the hint gives you the answer.
 18. P1 In the automatic version, the red background. In the button version, if you press the button everytime and the other player doesn't, you feel like you're cheating!
P2 First (Intro): (1) At the end the hint system shows only one card. So it's easy to win the last cards. Perhaps you can decrease the score every time the hint is pressed. Second (Extra): (1) It's hard to memorise colour when the cards are "underline" with red colour; (2) (same as first).

► **Any other comments you want to tell us?**

1. P1 Thanks.
P2 Sometimes clicking on cards did not work 100%.
2. P1 No.
P2 I think it would be better if system can automatically give users a kind of guidance or help (like the one without Hints buttons).
6. P2 Colours on 'Hints' without button too bright.
7. P2 Good fun.
8. P1 Nope.
P2 The section containing various cards should not be so hard to make out what card is what (too blurry).
11. P1 Nope.
P2 The game was not fun, just annoying.
14. P2 No.
17. P1 The percentage odds of where a card could be doesn't seem to matter, as the card was always in one of the highlighted ones.
P2 I like play this game.
18. P2 When I played I try to look at on other side as the card was, but Vincent knows this.

Thank you very much!

Responses to Fischlar-DT 1

► **How often do you watch TV news?**

- Seldom 3
- Less than once a month 4
- Around once a week 8
- A few times a week 11
- Daily 10

► **How knowledgeable are you with current affairs in general?**

- Not knowledgeable at all 1
- Not very knowledgeable 9
- Neutral 10
- Fairly knowledgeable 13
- Very knowledgeable 3

► **How often do you do searching/browsing on the web?**

- Less than once a month 1
- Average once a week
- Average 2-5 times a week 9
- Daily 26

► **How familiar are you with the system being evaluated?**

- Not at all 7
- A little 6
- Fairly 7
- Quite a bit 10
- Very much 6
- I developed it

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
I am usually well aware of what other people are doing in a group situation	3(E)	23: 17(E) 6(I)	7: 2(E) 5(I)	2(I)			
I like working in groups	7: 6(E) 1(I)	12: 7(E) 5(I)	11: 4(E) 7(I)	2(E)	2(E)		1(E)
I feel confident about using the DiamondTouch	15: 12(E) 3(I)	19: 10(E) 9(I)	1(I)				
I feel confident about using this application	9: 8(E) 1(I)	20: 10(E) 10(I)	6: 4(E) 2(I)				

Thank you very much!

Post Fischlar-DT1 Responses

► **What is your overall impression about the system?**

1. P1 Good features to search after related videos (“Browse-Function”); Zoom effects – nice; but because we are used to work with the mouse it was a bit strange first.
P2 Good for flicking through videos but it’s easy to lose control of the search.
2. P1 The software is not easy to use. The system response time was not fast enough.
P2 It’s easy to use. User can visualise whole searching process.
3. P1 A little buggy but otherwise easy to use. “Browse” function was not very clear.
P2 Fun, but flaky. Imprecise, unreliable.
4. P1 Mostly fine, some slowdown.
P2 Sometimes a it slow in terms of following your movement. But apart from that it’s quite impressive.
5. P1 Good. Useful for searching collaboratively.
P2 Simple and straightforward to use but not perfect (doesn’t always recognise touches and freezes occasionally).
6. P1 V good.
P2 A little buggy. I feel I would have enjoyed the system more if it had worked correctly.
7. P1 Very good, easy to use and very quick to run.
P2 Not as interesting as other games we played
8. P1 Interesting idea, but a little boring and tediously slow.
P2 Poor imitation of an internet search engine.
9. P1 I thought it was interesting as I’d never used anything like it before.
P2 Not as user-friendly or responsive as previous systems – pictures frequently got stuck.
10. P1 It’s the same as most search engines used, it just has a touch screen. The find similar button was clever.
P2 It was easy to use, but a bit cumbersome.
11. P1 Quite a good way to manage your search results.
P2 It worked, it was a little unintuitive, a bit pointless, but some nice features.
12. P1 Easy to use but sensitive to any movement of the screen.
P2 Buggy, prone to mis-interpreting/ignoring touches.
13. P1 It is a bit tricky. Would be better if hooked up to the Internet.
P2 Didn’t like this system at all and can’t see anyone wanting to use it or enjoy it.
14. P2 Useful, but difficult to use as it is.
15. P1 Interesting, but awkward to use because of the touching not matching the images.
P2 Its quite impressive.
16. P1 A bit confusing, but good.
P2 Very interesting way to look at photos and videos.
17. P1 Can be a lot of fun as well as useful. The interface is pretty ok.
P2 Good system handy to use.
18. P1 The rotate and resize features are really cool. I found the “Play” feature not very useful. The “Find Similar” feature is quite efficient. Sometimes it freezes and the pictures are stuck.
P2 It’s a very good way to search (photo and) video. You can manipulate the pictures like real one.

► **Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:**

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
The system is easy to use	6: 4(E) 2(I)	12: 6(E) 6(I)	9: 6(E) 3(I)	3: 1(E) 2(I)	2(E)	3: 1(E) 2(I)	
Learning how to use the system was easy	8: 5(E) 3(I)	20: 13(E) 7(I)	6: 2(E) 4(I)		1(I)		
The system response time was fast enough	2(E)	4: 2(E) 2(I)	11: 7(E) 4(I)	2: 1(E) 1(I)	9: 5(E) 4(I)	6: 3(E) 3(I)	2(E)
The system interface allowed me to do the task efficiently	2: 1(E) 1(I)	7: 4(E) 3(I)	8: 6(E) 2(I)	2: 1(E) 1(I)	9: 4(E) 5(I)	6: 4(E) 2(I)	1(I)

I liked the layout of buttons and widgets.	4: 3(E) 1(I)	10: 6(E) 4(I)	8: 7(E) 1(I)	6: 2(E) 4(I)	3: 1(E) 2(I)	4: 1(E) 3(I)	
I liked the colours used.	6: 4(E) 2(I)	12: 7(E) 5(I)	5: 3(E) 2(I)	10: 5(E) 5(I)	1(I)		1(E)
It was easy to be aware of what the other person was doing	6: 5(E) 1(I)	19: 8(E) 11(I)	4: 3(E) 1(I)	4: 2(E) 2(I)	2(E)		

► How was the coordination between you and your partner in searching? (e.g. was your action bothered by your partner's action? Did you by mistake interrupt your partner's action? Did you have to talk to each other for who does what, etc.?)

1. P1 It was fine and improved over time. Yes, we talked to each other in order to be sure of what we see on the pictures consequently a feeling of confidence arouse.
P2 Interrupting happened several times: some actions (use of certain functions) made to wait the partner -> otherwise total loss of control.
2. P1 Yes some action of my partner bothered mine. Yes, we talked to each other, but not about who does what. Just talk about who thinks what.
P2 The coordination between us was quite good. We don't bother each other or interrupt each other at all. Even sometime, we can separate the task (e.g. my partner enters similar query and I'm still doing the searching in the meantime) to make performance more efficient.
3. P1 Not much interaction. Mostly discussing ideas of how to search better. Some team moving items around.
P2 No interrupting, occasional helping each other to complete an action.
4. P1 When a new search was started by my partner, my interface slowed down.
P2 Not for me, I found my partners actions did not affect my own. There was no real communication necessary, only to make him aware of a new search or that.
5. P1 We were well co-ordinated and discussed search words.
P2 No problems.
6. P2 Got better as we went along. Was good to try to establish roles – Pass shots to other person etc.
7. P1 We both operated on different things which made the process more efficient.
P2 Sometimes we cut off each other's videos to play our own. Other than that, good communication.
8. P1 A little hectic to work with another person, especially if the program/system can't react quickly to multiple people.
P2 Search could be interrupted by the other searching again when the other was examining.
9. P1 Our coordination was good and we communicated regarding the searching and what we would do.
P2 Good coordination, we didn't interfere with each other's actions as we only had to carry out one action at a time.
10. P1 On occasion a search was disrupted. When one was typing in a search, the other was still trying to view a clip, occasionally cancelling the search.
P2 When one person was searching, the other person had to stop because the screen froze. Other than that it did not cause a problem.
11. P1 No problems. Passing search results and the keyboard was a very nice feature.
P2 We worked together v well, talking all the way. We didn't disrupt each other.
12. P1 We had to decide on the keywords to use and to decide on the validity of the images.
P2 Ok, we discussed what to do, kept away from each other.
13. P1 Fine, we talked to each other.
P2 Quite good, just became tired and this made the co-ordination slow.
14. P1 We didn't bother each other. We did talk each other.
P2 Action was not bothered. Did not interrupt each other. We did talk whilst searching.
15. P1 We sometimes got in each other's way. It was difficult to coordinate our efforts.
P2 The coordination was good.
16. P1 We talked about we should look for.
P2 We both looked for the videos on our own side and if we saw something the other had we thought was relevant we said to the other to include it.
17. P1 We did our own thing most of the time, but communicated when deciding which videos to watch.
P2 It is a team game. We did well with each other.
18. P1 Sometimes we pressed "Find Similar" while the partner was still searching among the displayed pictures. We talked especially when we wondered what to type in the search textfield.

P2 We talked to each other to: (1) Check that was a good picture; (2) Clean the search area with others pictures from “browser” or “find similar”; (3) When we had a new idea of what kind of keyword we now searched.

► **Please add comments on what you liked BEST about the system you used:**

1. P1 Search-Function: It was possible to put in different words so that the task was easier to fulfil. To put in the right word can have a huge effect.
P2 Very nice to “flick” through a lot of videos; video (pics) and keyboard were turning around automatically when dragging to the other side.
2. P1 No
P2 The last 2 (find 10 relevant shots). Because you try to find them as soon as you can rather than wait for 10 mins.
3. P1 Resizing/Rotating videos.
P2 Moving and resizing!
4. P1 Simple interface.
P2 Once you know how to use it, it is quite easy to function and your speed improves.
5. P1 Easy to collaborate, see what the other person is doing.
P2 The layout, it allowed a lot of different videos to be viewed quickly.
6. P1 The “Browse” feature and the ability to increase size.
P2 Sounds.
7. P1 It was well laid out and ran quickly.
P2 Video interaction.
8. P1 The concept of searching for pictures and videos and simply dragging them to one corner to be played. Pretty cool.
P2 The keyboard (popup)! A bit glitchy to call though.
9. P1 I liked the layout. I thought that the system was very innovative and it was interesting to get the opportunity to use it.
P2 The videos were amusing.
10. P1 The “Find Similar” button was a handy way to continue the search in a similar pattern.
P2 The hands-on style of search engine.
11. P1 The passing of items and the keyboard. Also the way they rotated automatically. Enlarging and decreasing the size of objects was also impressive and very useful.
P2 It was very easy to understand.
12. P1 It was easy to use and had integrated searching and video playing.
P2 The ability to both easily see the screen.
13. P1 It was easy to know which ones were relevant if you were lucky with the search.
P2 The video quality.
14. P1 Images and speed are nice.
15. P1 The way it looked.
P2 The amount of options available to make the search efficient.
16. P1 The similarity function is quite good.
P2 Buttons were very good.
17. P1 The “Find Similar” command was very useful. The ability to rotate and resize images was very helpful.
P2 This game has sound and video.
18. P1 Being able to move, resize and rotate the thumbnails as if I was actually touching real objects.
P2 Manipulate pictures like real pictures.

► **Please add comments on what you DISLIKED MOST about the system you used:**

1. P1 Seldom we couldn't use the keyboard and thus started the (technical problem) system again.
P2 Some functions were on the other side of the table, so I had to bend over. As a consequence, I used the functions less. A new search just covered old results so I lost track of the whole search (to control search seems to be hard).

2. P1 System response time was too slow.
P2 The first 2 (10 mins task). You have to wait for 10 mins to complete task and sometimes it could be very boring.
3. P1 Kept crashing! Browse function.
P2 Unreliable. No way of knowing what is working and what is not. Completely unresponsive when searching.
4. P1 Slowdown when 2 people ran things. Slight lagging response time.
P2 Sometimes it was a bit slow, maybe at times when so much is going on at once.
5. P1 Layout of buttons can be awkward. At times not responsive enough.
P2 After moving the clips around and searching for more clips the table became too cluttered.
6. P1 Images getting stuck on screen.
7. P1 Sometimes the touch didn't work properly or some of the icons would freeze.
P2 Froze sometimes.
8. P1 Results were mostly political news, which personally does not interest me.
P2 Response time! Overcrowding the page. Slack search engine! (Single-minded). Only the (similar image) was any good!
9. P1 A part of the table kept freezing. Sometimes the response time of the system was a little slow.
P2 The responsiveness was poor; and sometimes a video played twice. The saving mechanism was also unresponsive at times.
10. P1 The clips were very short and the clips that came up were quite unrelated to the search.
P2 It was not fast enough to respond to our touch.
11. P1 Response time. Certain objects freezing, not responding etc.
P2 It was a little pointless. It was only American and Asian videos.
12. P1 The sensitivity to movement of the screen.
P2 It not noticing taps.
13. P1 There should be a copy of all the tools on both sides.
P2 Disliked the whole system, as there was way too many irrelevant searches.
14. P1 It is not easy to control with hands all the time.
P2 The keyboard response was poor. Having the projector overhead resulted in a shadow when I tried to move in and get a better look at what I was doing.
15. P1 Moving and resizing the images felt very clumsy. It seemed cool, but was not a particularly smooth experience.
P2 There were different buttons on each side of the table, I had to reach to the other side every time I wanted to play a shot.
16. P1 Some pictures were double. Too many pictures at the same time.
P2 It was too buggy at times.
17. P1 Images stick sometimes and other times the images didn't get saved properly.
P2 Hard input. Sometimes it is stuck.
18. P1 When pictures are stuck.
P2 Sometimes the system doesn't respond like I want.

► **Any other comments you want to tell us?**

1. P1 Thank you! To search together has both advantages (exchange of ideas) and disadvantages (lack of concentration). I can't say which weighed more. Maybe it depends on the situation.
P2 Would be nice to be able to track the search e.g. list of all keywords used so I can click a previous keyword again and I get the results of this keyword again.
2. P1 I don't think the DiamondTouch system is a good choice for a searching task, especially for image or video searching task. Because such tasks mainly depend on visual features, not depend on touch features.
3. P1 Videos persisted on the screen after they had been moved. Browse function was unclear how or if it was working.
P2 Video should play "in-place" on the table. Videos should be deleted with a fist, not a drag.
5. P1 Would be better if video playback was on the touch-screen (i.e. thumbnail is a video rather than static picture).
6. P1 Nope. Good experiment.
7. P2 No.
8. P1 Good idea.

- P2 Fix the others first!
11. P1 Nothing apart from lack of responsiveness.
P2.....uhh.... cheese it!
13. P2 Completely disliked the system!!!
14. P2 No.
17. P1 This system might be more useful for using by one person as things to save are sometimes hard to decide by both people.
P2 This is a very good game, but the controller is not accurate. Some of the videos are very short.

Thank you very much!

Fischlar-DT2 Post Responses

► What is your overall impression about the system?

1. P1 It is nice to have a possibility to search for an item together without using 2 laptops.
P2 Very good.
2. P1 The sensitivity is not good. Interface design is interesting
P2 The first one is very user-friendly and easy to use. The second one is a bit messy, too many options (Ext first).
3. P1 Very buggy, but intuitive and could be easy to use in the future.
P2 Interesting, but flaky and unreliable.
4. P1 Searches did not give accurate results. Easy-to-use.
P2 Good, gets stuck sometimes but easy to use, fun and easy to get good at.
5. P2 Easy to use although th screen can become cluttered with too many clips.
6. P1 Good system, easy to use.
P2 Preferred the first system, but colours of the second.
7. P1 Easy and enjoyable to use.
P2 Bit slow and not too interesting.
8. P1 Pretty good.
P2 A poor quality product.... A lot of work needed to make this ‘good’ idea work!
9. P1 It is innovative and interesting to use though it does have some minor faults.
P2 It was quite glitchy and the application was not very interesting.
10. P1 Great when it works well but all too frustrating when it doesn’t. Good set-up and well laid out. Easy to comprehend.
P2 That it is a very good idea but it needs to be fine-tuned as it kept freezing.
11. P1 Works rather well although a lot of search results were unrelated.
P2 It’s alright, a bit annoying.
12. P1 It is good, but can be very sensitive to movement.
P2 The lack of feedback is annoying. Also the fact that the video plays in a different place.
13. P1 Very impressive. Need to work out the kinks though!
P2 Enjoyed it a lot more than last week’s system.
14. P2 Shared Functions – Good. Separate Functions – Ok.
15. P1 Difficult to find results. Easy to use. Collaboration doesn’t seem beneficial. It seems to be more efficient to use a mouse and search on your own.
P2 I like it.
17. P1 It’s fun to use, but got very slow, sometimes stopping.
P2 Good system with low response, sometimes it stuck.
18. P1 It’s easy to use. I like when there is a “Find Similar” button.
P2 It’s easy to explore pictures/videos database.

► Which version of the system do you like better?

	Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
Shared Functions	10: 6(E) 4(I)	5(I)	10: 6(E) 4(I)	2(I)	3(E)	1(E)	1(E)
Separate Functions	10: 8(E) 2(I)	12: 7(E) 5(I)	6: 1(E) 5(I)	2: 1(E) 1(I)	1(I)		

Why?

1. P1 Because I felt beter with my own functions. It allowed me to concentrate on my own search if I wanted (Ext LD, Int QA).
P2 I liked the version with the “Saved Area” in the centre much better and I preferred the separate functions (Ext LA, Int SA).
2. P1 Separate Functions makes my action easily done (Ext N, Int LA).
P2 It’s user friendly, compact, gives you bigger area to view the pictures (Ext SA).
3. P1 You rarely use the “Find Similar” function in the separate functions version and the suggested clips is better (Ext QA, Int LA).

- P2 With shared widgets, it is easier to be aware of what the other user is doing, and to work with them without interfering (Ext SA, Int N).
4. P1 Clash between user input (Ext QD, Int SA).
P2 You get your own “Play” button! You feel like you have more space with the separate functions. Everything is very cramped with shared functions (Ext SD, Int SA).
 5. P1 More incentive to collaborate; more aware of other person’s actions; other person less likely to interfere with my actions (Ext QA, Int LA).
P2 Because only one clip could be played at a time, it made sense to have only one “Play” button (Ext QA, Int LA).
 6. P1 Easy, straight forward, large buttons. It is hard to stretch to some buttons on one side of separate functions and then it is also hard to remember to use the “Remove” on opposite side to all other buttons (Ext SA).
P2 Separate: Got in each other’s way and easier to work as a team in shared system (Ext SA, Int LA).
 7. P1 Easier to find things while cooperating (Ext SA, Int LA).
P2 (Int SA).
 8. P1 Only one person needs to play stuff at one time, and the other browse, dump, blah, blah (Ext SA, Int QA).
P2 We weren’t crowding around the same thing making it easier to follow (Ext LA, Int SA).
 9. P1 As it was quicker to do what needed to be done i.e. viewing and removing slides (Int QA).
P2 I liked the separate functions better because it allowed us to work more efficiently, whilst still concentrating on the common goal (Ext QA, Int SA).
 10. P1 Separate functions allows each user have more independence in choosing their clips (Ext LA, Int SA).
P2 There was less of a stretch to access the functions (Ext LA, Int SA).
 11. P1 When using the separate functions, when playing videps they tended to override each other before they had finished (Ext LD, Int QA).
P2 Because Evan tends to hog all the good stuff (Ext LD, Int QA).
 12. P1 It allowed more efficient time-management (Ext SA).
P2 The fact that they were closer so work could be more effectively split (Ext LA, Int QA).
 13. P1 They help prevent back back injury due to stretching! (Ext SA).
P2 (Ext LA, Int QA).
 14. P1 Share Functions, It is not easy to control (Ext LA, Int SA).
P2 The shared functions was less cluttered than the separate functions since there were less buttons. The Save Area is also better if it is at the side (Ext SA, Int N).
 15. P1 The separate one allowed me to concentrate on the task at hand. There were still clashes when trying to play movies at the same time (Ext LA, Int QA).
P2 The buttons were closer (Ext QA, Int SA).
 16. P1 It’s more efficient (Ext N, Int QA).
P2 (Ext SA, Int LA).
 17. P1 With separate functions, it was less cluttered around the buttons, and it was easier with the Save Area in the centre (Ext LA, Int QA).
P2 We will not interrupt each other (Int SA).
 18. P1 In the Shared version we are aware of what the other is doing but we have to use the same buttons. In the separate version we have our own buttons but we are no aware of what the other is doing so we can “browse” or “Find Similar” at the same time so we bother each other’s action (Ext QA, Int QA).
P2 Because the layout and the colours are better than the other and you can choose to activate “Find Similar” (Ext LA, Int QA).

► Please rate (i.e., check an appropriate box) agreement or disagreement with the following statements:

		Strongly agree	Quite agree	A little agree	Neutral	A little disagree	Quite disagree	Strongly disagree
The system is easy to use	Shared Functions	16: 10(E) 6(I)	12: 7(E) 5(I)	6: 3(E) 3(I)	1(I)	1(I)		
	Separate Functions	13: 9(E) 4(I)	14: 6(E) 8(I)	5: 4(E) 1(I)	4: 1(E) 3(I)			
Learning how to use the system was easy	Shared Functions	20: 14(E) 6(I)	13: 6(E) 7(I)	2(I)	1(I)			
	Separate Functions	20: 14(E) 6(I)	13: 6(E) 7(I)	2(I)	1(I)			
The system response time was fast	Shared Functions	3(E)	8: 3(E) 5(I)	9: 6(E) 3(I)	5: 2(E) 3(I)	6: 4(E) 2(I)	3: 1(E) 2(I)	2: 1(E) 1(I)

enough	Separate Functions	3: 2(E) 1(I)	9: 4(E) 5(I)	6: 4(E) 2(I)	6: 3(E) 3(I)	5: 3(E) 2(I)	5: 3(E) 2(I)	2: 1(E) 1(I)
The system interface allowed me to do the task efficiently	Shared Functions	7: 5(E) 2(I)	10: 5(E) 5(I)	6: 2(E) 4(I)	4: 2(E) 2(I)	6: 4(E) 2(I)	2: 1(E) 1(I)	1(E)
	Separate Functions	5: 4(E) 1(I)	13: 7(E) 6(I)	5: 1(E) 4(I)	4: 3(E) 1(I)	5: 3(E) 2(I)	3: 2(E) 1(I)	1(E)
I liked the layout of buttons and widgets.	Shared Functions	11: 8(E) 3(I)	9: 5(E) 4(I)	9: 5(E) 4(I)	5: 2(E) 3(I)		2(I)	
	Separate Functions	8: 6(E) 2(I)	15: 7(E) 8(I)	6: 3(E) 3(I)	6: 3(E) 3(I)	1(I)		1(E)
I liked the colours used.	Shared Functions	10: 6(E) 4(I)	10: 8(E) 2(I)	4: 2(E) 2(I)	8: 3(E) 5(I)	1(E) 2(I)	1(I)	
	Separate Functions	9: 5(E) 4(I)	14: 8(E) 6(I)	5: 3(E) 2(I)	4: 2(E) 2(I)	2: 1(E) 1(I)	1(I)	1(E)
It was easy to be aware of what the other person was doing	Shared Functions	12: 7(E) 5(I)	16: 7(E) 9(I)	3: 2(E) 1(I)	1(I)	3(E)	1(E)	
	Separate Functions	8: 5(E) 3(I)	14: 9(E) 5(I)	4: 1(E) 3(I)	3: 1(E) 2(I)	4: 2(E) 2(I)	2: 1(E) 1(I)	1(E)

► How was the coordination between you and your partner in searching? (e.g. was your action bothered by your partner’s action? Did you by mistake interrupt your partner’s action? Did you have to talk to each other for who does what, etc.?)

1. P1 It improved by the second time we were using this search engine. We talked to each other. This was a help for both of us.
P2 This was the second time we used the system for searching. All the functionality were already clear and so we did not have problems anymore to coordinate our actions.
2. P1 We did not bother each other. Yes, we talked to each other for who does what.
P2 Was quite good, no bother each other. We talked to each sometime during searching.
3. P1 Occasionally I interefered with him as I was dragging clips around but otherwise it was fine.
P2 Separate “play” buttons is a bad idea and promotes interference.
4. P2 Very difficult! Difficult to reach over when we have to share the “Play” button. I much preferred the separate functions.
5. P1 With separate controls, other person can interrupt video playback.
P2 There were no problems with coordination.
6. P1 We had to work to talk to each other to discuss what to search for/ browse for/ play etc! Especially in shared functions not not bothered by person’s actions. Was good interaction.
P2 It was a problem in the separate system but in the shared it was easy. Talked in shared, interrupted in separate.
7. P1 Sometimes videos would be removed or changed but overall it was fine.
P2 Once he cancelled out my video to watch his own!!
8. P1 I had to physically stop him from doing silly things!
9. P1 Our coordination was good and we discussed which slides to view and which to dispose of etc.
P2 We didn’t get in each other’s way as we were using half of the table each.
10. P1 It was quite awkward, especially with the shared functions having to wait, and with separate functions when one clip cut off the other.
P2 I do not think that coordination between us was a problem and I don’t think we interfered with the othe’s action except on the “Play” function as there is only one viewing screen.
11. P1 The playing of videos was interrupted by each other in the separate functions. Apart from that it was ok.
P2 Nah, we managed not to interrupt each other, except for watching clips, they tended to overlap.
12. P1 It was fine, our actions were dependent on one another.
13. P1 We worked together fine.
P2 Fairly good in this week’s task, he mainly cleared out the rubbish pictures whereas I mainly played the relevant videos.
14. P1 We didn’t bother each other. We did talk during the games.
P2 In the Shared Functions the coordination was good. With separate functions we tended to do different things.
15. P2 Sometimes – with separate functions I wasn’t always aware of what Tim was doing.
16. P1 Some interruptions and a little talk.
17. P1 With the shared functions, it was easier to coordinate searching and playing, but with the separate functions, I had to look to the opposite side to find out.

- P2 For this system, we do the same work together, so we do not really bothered each other.
18. P1 We sometimes bothered the partner in the shared version, for example in moving pictures on buttons, but we also bothered the partner in the separated version by browsing or playing at the same time.
- P2 I said when he can “browse” or “find similar” to keep in first plan the pictures which seem good and to improve the search time.

► **Which did you prefer – Saved area at the side of the table or Saved Area in the centre?**

1. P1 At the side bar. It was easier to concentrate on the videos then.
P2 I preferred the “Saved Area” at the centre.
2. P1 I prefer “Saved Area” in the centre.
P2 Saved Area at the side of the table.
3. P1
P2 At the side - it's out of the way and one rarely wants to retrieve something from it. It isn't important enough to be placed in the centre.
4. P1 Saved area in the centre.
P2 At the side of the table as it was out of the way.
5. P1 At the side.
P2 At the side.
6. P1 Side.
P2 Centre.
7. P1 Centre.
P2 Centre.
8. P1 Centre... I don't know why.
P2 Centre, allowed me to build up around the save point (of interest went closer).
9. P1 I preferred the saved area in the centre of the table as I thought it was more accessible.
P2 I preferred the central orientation for the saved area, as it made it easier for both of us to reach it. It also made the exercise more team-based and therefore more enjoyable.
10. P1 Centre.
P2 Saved Area at the side.
11. P1 Saved area to the right.
P2 I liked saved at the side.
12. P1 Saved area in the centre.
P2 Centre.
13. P1 In the centre, it's more convenient.
P2 Saved Area at the side so it doesn't interfere as much with your central line of vision.
14. P2 Saved Area at the side.
15. P1 At the side. In the centre felt unnatural! The centre was the pocus of attention – not suitable for found matches.
P2 Probably the centre, but it's not big difference.
16. P1 In the centre.
17. P1 Saved Area in the centre.
18. P1 At the side.
P2 I prefer saved area in the center.

► **Did you prefer having a Find Similar button, or having the system suggest shots for you?**

1. P1 Similar button because then I was active and could probably have a closer look at the former videos before new come up.
P2 I preferred the “Find Similar” button.
2. P1 I preferred the “Find Similar” button.
P2 Prefer system suggest shots for me.
3. P2 Preferred having a separate button. When similar clips are found, they are always placed over current clips, hiding them from view. I'd rather only have new clips on the table when I feel ready for them, and when I've exhausted the current set of clips on the table.
4. P1 No preference either way.

- P2 Having the system suggest shots, saved time!
5. P1 Find Similar.
P2 Having a Find Similar button.
 6. P1 Find Similar button.
P2 Suggestions (but probably because every save meant that last shot was saved over).
 7. P1 Find Similar.
P2 Suggest shots.
 8. P1 Find Similar button.
P2 Find Similar, but it wasn't always accurate.
 9. P1 I preferred having a Find Similiar button as I thought the results were more accurate and suited to the task.
P2 Having the system suggest shots was preferable, as it was basically the same function as the 'find similar' button except it was more efficient.
 10. P1 Find Similar.
P2 Having a Find Similar button.
 11. P1 Find Similar button.
P2 I preferred the find similar thingy.
 12. P1 Find Similar button.
P2 Find Similar.
 13. P1 Suggested shots, saved time.
P2 I found that the "Find Similar" button was much more effective in developing relevant searches.
 14. P1 Yes I did (assume that means "Find Similar").
P2 Having the system suggest shots
 15. P1 Suggested Shots. It was less work and involved less active participation on my behalf.
P2 Find Similar.
 16. P1 Find Similar.
P2 Find Similar as there were more options.
 17. P1 System suggesting shots.
P2 Find Similar button is better.
 18. P1 "Find Similar" because it shows more similar results.
P2 I prefer have a "Find Similar" button.

► **Please add comments on what you liked BEST about each system you used:**

1. P1 Separate Functions: good collaborative work possible with his own space. Shared functions: more space with pictures, forced to work more together.
P2 I liked the positioning of the buttons and "Saved Area". I liked both versions better than last time.
2. P1 No comments.
P2 The first system: I like the GUI. It's user-friendly and have bigger viewing area. The second system: It give the user more functions to use, but usually user won't use all in a short time.
3. P1 Liked the suggested video clips box.
P2 Dragging, resizing and rotating objects.
4. P1 I prefer having my own control as much as possible.
P2 Separate functions: Speed you can get up to when you get used to it.
5. P1 Shared controls: more incentive to collaborate. Individual: not bothered by what other person is doing.
P2 It was simple and easy to use.
6. P1 Shared system – liked colour, large buttons need for collaboration... Other - liked the Separate layout.
P2 Shared: Easier to work together; suggested shots. Separate: Colours.
7. P1 Playing the videos and browsing.
P2 The use of TV clips.
8. P1 I liked the idea of both systems, little pics you can play by dragging it to a button.
P2 Layout! The idea!
9. P1 It was interesting and easy to use. It was a good opportunity to get to use this system.
P2 Enlarging the photos is useful as it allows you to see things more clearly.

10. P1 Separate Functions: Greater independence and freedom with the choices. Shared functions: More efficient, I think to get more clips.
P2 Having the function buttons were more accessible on the separate interface system.
11. P1 Shared: It was easy to be aware of what the other person was doing. Separate: Easy to reach separate "Play" etc.
P2 Together we worked best as the instructions were never overlapping. Separate controls were easier to reach and they looked better.
12. P1 The separate system worked better for a pair of users. The shared system was easy to use.
P2 Shared: Forced you to watch other person. Separate: allowed you split work separate.
13. P1 Shared makes the system much more user-friendly for a team of people.
P2 Very easy to use.
14. P1 Shared Function: If get a suggestion area which helps game player. Separate function: It's v easily controlled and it runs with fast speed.
P2 The layout and colours in the Shared Functions. The independence allowed by separate controls.
15. P1 I like the high contrast colours used in the shared system. It made the functionality stand out more. The separate system keeps out your way when searching.
P2 My own "Play" button (on my side) in the separate functions version.
16. P1 In most cases the query ? were good.
P2 Buttons were close to me on separate view. I could see what Hristo was doing more easily on the Shared View.
17. P1 Shared: Automatically suggesting the shots after saving was handy. Separate: I didn't have to coordinate movement with my partner as much as with the shared.
P2 Nice interface and easy to use.
18. P1 Shared: Seeing what the other is doing is easy. Separate: Layout + Colours
P2 I prefer to have the shared buttons because I have less movements to do.

► **Please add comments on what you disliked MOST about each system you used:**

1. P1 Separate functions: Wasted space on the DiamondTouch. Shared functions: disturb the other one because there's just one.
P2 The Search button: the text field does not show the whole text.
2. P1 Sometimes response time is too long.
P2 The first one: colour isn't good enough. The second one: doesn't give the users enough care to view the search results.
3. P1 Bugs! Some videos got stuck in place and sometimes it's hard to know whether the system is working or just not returning results.
P2 Typing on a "keyboard" without tactile feedback is slow and hard on the fingers. When touching a video, it often leaps off to the side without explanation.
4. P1 With all of the functions spread out over the whole board, it was difficult to access the functions farther away.
P2 Shared Functions: Shared "Play" button and the position of where it was placed!
5. P2 Sometimes I had to drag a clip into the Saved or Play area a few times for it to work.
6. P1 Separate Systems: All buttons were too small; Remove was too far away on one side and not intuitive on other. Shared: Suggest area.
P2 Shared: New shots positioned over old shots. Separate: Hard to work cause interrupted by each other.
7. P1 Similar pictures constantly coming up.
P2 Search was slow, sometimes didn't know if it worked or not.
8. P1 The occasions where it froze up.
P2 Response time; errors and glitches.
9. P1 At times the screen froze and then the programme had to be restarted.
P2 The system was very choppy; and parts of the table failed to respond on occasion.
10. P1 Separate Functions: One clip overplays another without being aware it's going to happen. Shared Functions: No Find Similar function.
P2 That the Shared Function system kept freezing.
11. P1 Separate: Overriding of videos. Shared: Difficult to reach far-away buttons.
P2 I didn't like the fact that the "Find Similar" results were not omitted, and there seemed to be no ordering.

12. P1 The colours on the shared system. The lag on both systems.
P2 Shared + Separate: Could only play one video at a time.
13. P1 Separate wasn't useful for more than one person.
P2 At times the system was slow to react to the movement of my hand.
14. P1 Shared Function: It runs slowly.
P2 Shared Functions: Having to reach across the screen to faraway buttons. Separate Functions: The clutter caused by all the buttons.
15. P2 The suggestions in the Shared Functions version were not very useful.
16. P1 Interruptions, frozen.
P2 Whoever was last to get to the Play button over-rode the others video-separate. Buttons were far from me – Shared.
17. P1 Shared: A bit of coordination needed between me and my partner at times. Separate: System slowed down a lot when both of us tried the “find similar” option.
P2 The response time is a little bit slow.
18. P1 Shared: The pics suggested byt the system were not really relevant (not as much as the “Find Similar” button). Separate: Bothering each other's action.
P2 The keyboard was hard to use.

► **Any other comments you want to tell us?**

2. P1 No comments.
P2 From my point of view, I do like compact system, with user-friendly interface.
3. P1 Very intuitive and interesting interface.
P2 Videos should really play on the table.
6. P2 Would be good to be able to remove pictures without having to drag over to area (perhaps small ‘x’ in corner).
8. P1 Once you get used to it, it isn't bad. Much better than the first time. Seemed a lot of initial glitches were fixed.
P2 Not really... if the errors were corrected, I'd love to use this program.
9. P2 Good luck with the project.
11. P1 Have a good one.
P2 Nope.
13. P1 Great system, really great!!!
P2 Really enjoyed working with the different systems.
15. P2 I would prefer having all the buttons in a horizontal row in front of myself.
17. P2 For some of the topics, there is not too many video clips.
18. P2 Perhaps, I could be good if in the shared version, the buttons are in the side nearest from us.

Thank you very much!