

SenseSeer, a Real-time Lifelogging Tool



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Real time, Self management, Context aware lifelog tool

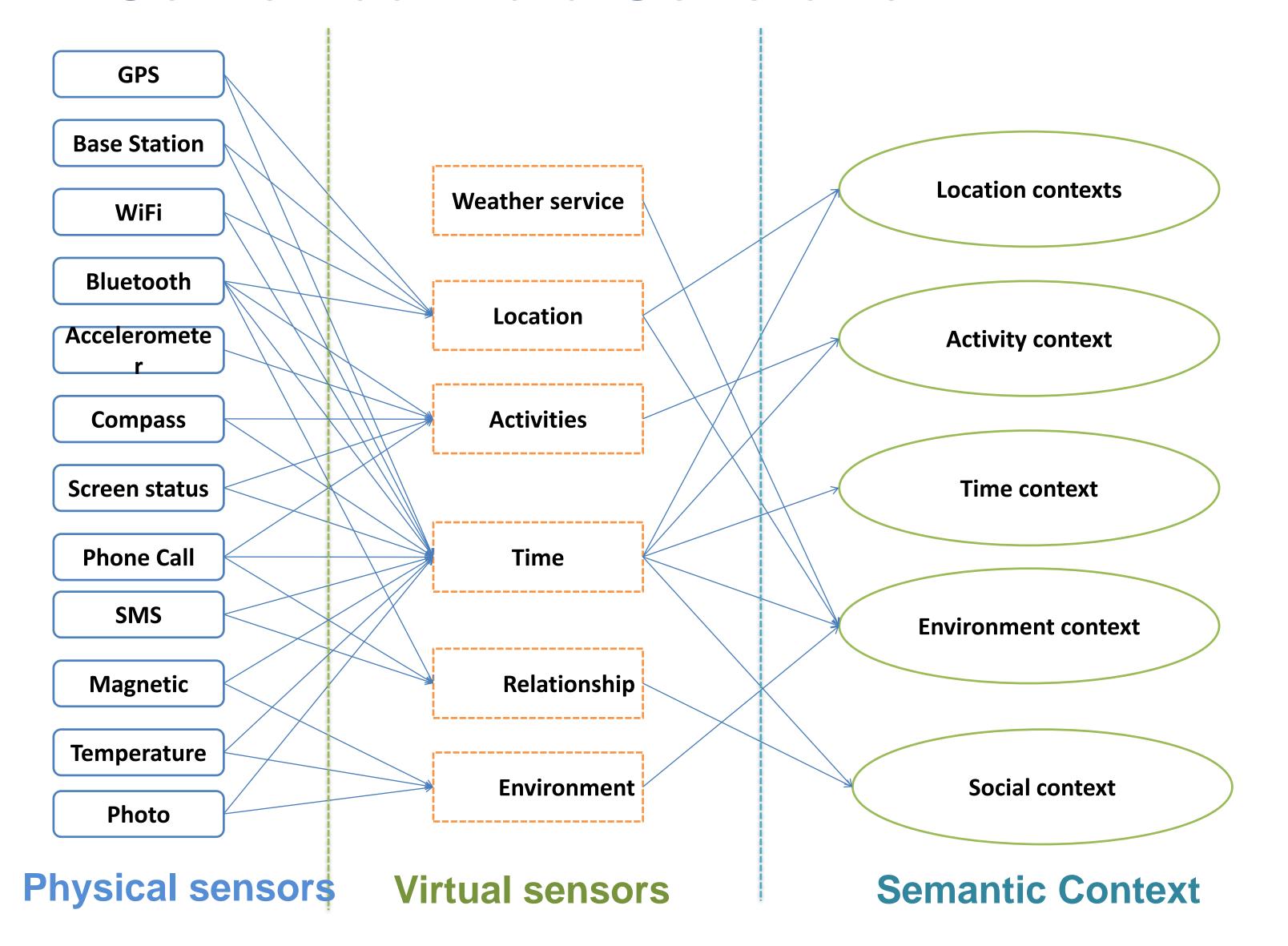
SenseSeer is a real-time lifelogging framework that runs on Android Phones (initally and iPhone later). SenseSeer mines all available sensors on the phone and analyses the data to identify and annotate events in real-time. SenseSeer uploads the events to our server architecture for additional semantic analysis and indexing. HTML 5 interfaces support multimodal access.

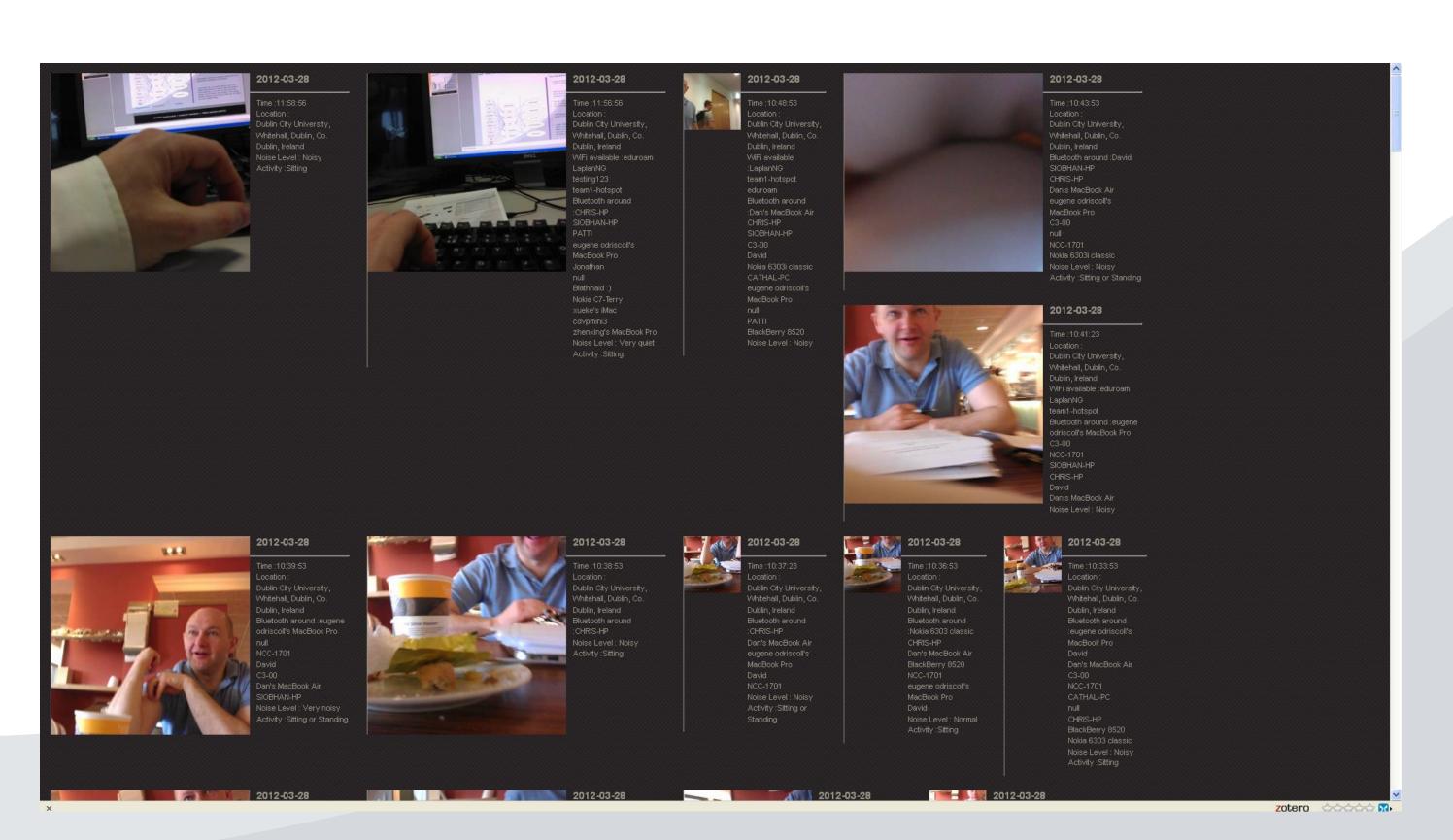


Sensors Detail

Sensor Name	Data detail	Frequency
Photo	Time, Photo, Face feature, image features	10 seconds
Noise	Time, Noise Level	30 seconds
GPS	Time, Latitude, Longitude, Speed	20 meters
WiFi	Time, Mac Address, Name, Signal strength	2 minutes
Bluetooth	Time, Mac Address, Name, Device type	2 minutes
Base Station	Time, Country ID, Area ID, Cell tower ID	event
Phone Call	Time, Number, status	event
SMS	Time, Number, type	event
Screen Status	Time, status	Event
Battery Status	Time, Charging /Un-charging	Event
Accelerometer	Time, X,Y,Z	0.2 seconds
Phone Status	Time, status	Event
Music	Time, music player status, Track title	Event
Headphone	Time, Plug –in/out	Event

Contextual Data Generation





System features

The main features of system are:

- •Context Awareness. Mining all sensors on the phone to gather a detailed life log.
- •Real-Time & Automatic. Life-Lens uploads data to the server automatically, in real time for automatic processing and knowledge extraction.
- •No User Input required. The app will run silently in the background and it will start automatically when user turns on the phone. And it will stop working when the phone is in use.
- •Automatically identifies the important experiences and upload them immediately to the server.
- •Long battery life. The system learns a user's life pattern automatically to cleverly utilise the sensors. At the beginning, it can work 18 hours with a full charge, but as it learns user activities, it can reduce sampling frequency and extend battery life, yet retain the same detailed lifelog capture.