

Context data logger

Use cases

14th May 2003

1 Phase II — external user data gathering

1.1 Naming a location (automatically identified)

Actor	Phone user, Phone, GSM network
Preconditions	Phone is switched on, software is running and has already gathered some location data
Description	The user moves, causing the phone to attach to another GSM base station. The software detects the cellid (and area) change. The new cell is identified as an important location by the software. The software alerts the user and asks them to give a name to the cell. The user may reject the importance of the location or give a name to it. The name is stored.
Exceptions	Storing fails: there is no more space.
Postconditions	The cellid and the name are stored as automatically identified, alternatively the cellid and a note that the user rejected the location as important

1.2 Naming a location (user-identified)

Actor	Phone user, Phone
Preconditions	Phone is switched on, software is running
Description	The user identifies the current location as semantically important and decides to name it. They activate the naming function in the software. If they have already named this cell, the given name is presented, but they may still give it a new name. The name given is stored.
Exceptions	Storing fails: there is no more space. The user cancels the action, nothing is stored.
Postconditions	The name and the current (at start of interaction) cellid are stored as user-identified.

1.3 Recording a description of current context

Actor	Phone user, Phone
Preconditions	Phone is switched on, software is running
Description	The user identifies the current context/situation as semantically important and decides to record a description of it. They activate the recording function in the software. The software prompts them to give a voice description. When they have given the description they stop the recording function.
Exceptions	Storing fails: there is no more space. The user cancels the action, nothing is stored.
Postconditions	The voice recording and current time are stored.
Notes	This may be done in a diary instead of by the software.

1.4 Transferring the data from the phone

Actor	Phone user, Phone, desktop/laptop computer
Preconditions	Phone is switched on, software is running
Description	User brings the phone into communications contact with computer. User requests the transfer of data from the software. The software switches logging to a new file. All old data files are transferred to the computer and (at user option) deleted from the phone.
Exceptions	Transfer fails, the files should not be deleted before confirmed transfer.
Postconditions	The logger is using a new log file. The old files are available on the computer.

2 Phase I — prototyping, internal user data gathering

2.1 Logging change in cell id

Actor	Phone user, Phone, GSM network
Preconditions	Phone is switched on
Description	The user moves, causing the phone to attach to another GSM base station. The software detects the cellid (and area) change, and logs the new values.
Exceptions	Logging fails: there is no more space.
Postconditions	A new log item is in the log that records the new cellid values and time of day of change

2.2 Retrieving log

Actor	Phone user, Phone, Desktop computer
Preconditions	Phone is switched on
Description	User brings the phone into communications contact with computer. User switches the logger to a new log file, copies the old file to the computer and deletes the old file.
Exceptions	Transfer fails, the old file should not be deleted before confirmed transfer.
Postconditions	The logger is using a new log file. The old file is available on the computer.