ShareDay: A memory enhancing lifelogging system based on group sharing

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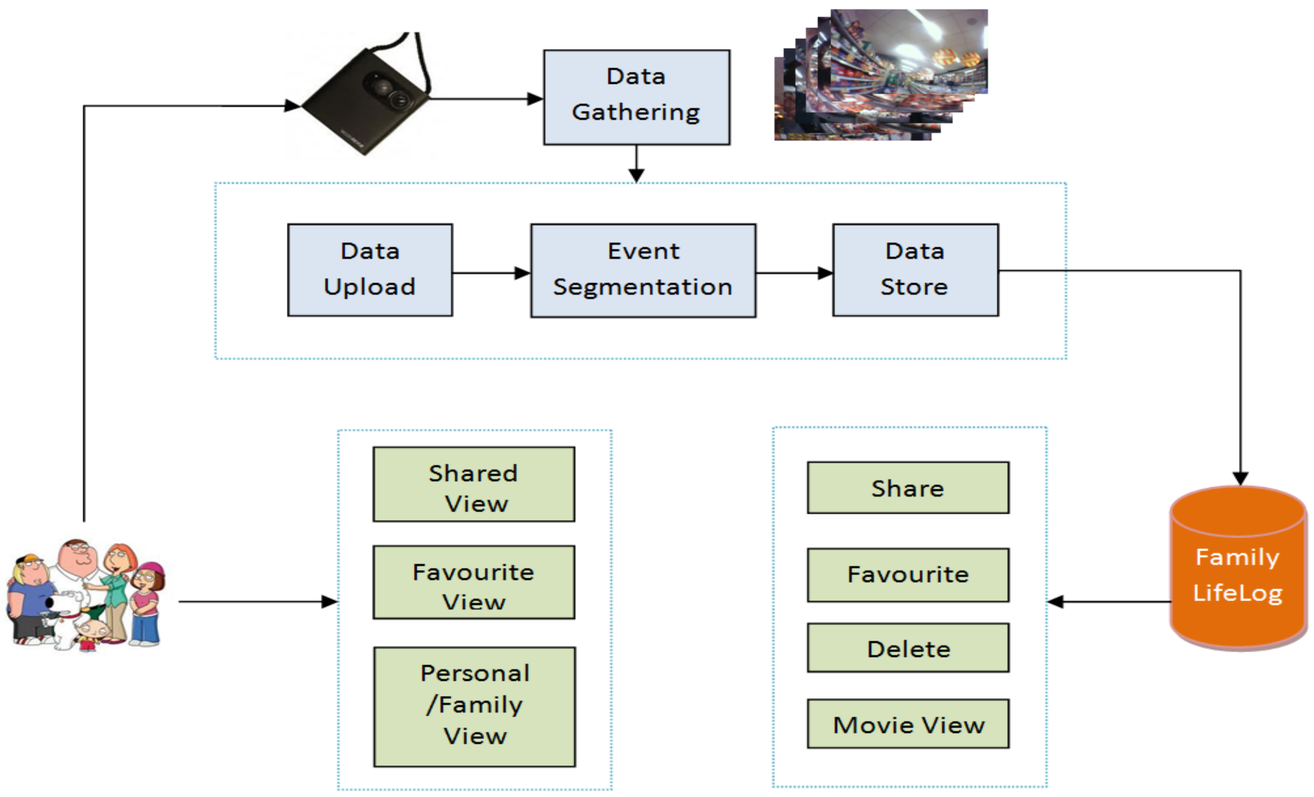
Abstract

Lifelogging is the automatic capture of daily activities using environmental and wearable sensors such as MobilePhone/SenseCam. Lifelogging produces enormous data collections that present many organization and retrieval challenges, including semantic analysis, visualization and motivating users of different ages and technology experience to lifelog. In this paper, we present a new generation of lifelogging system to support reminiscence through incorporating event segmentation and group sharing.

Overview of LifeLog Sharing System



Event Segmentation

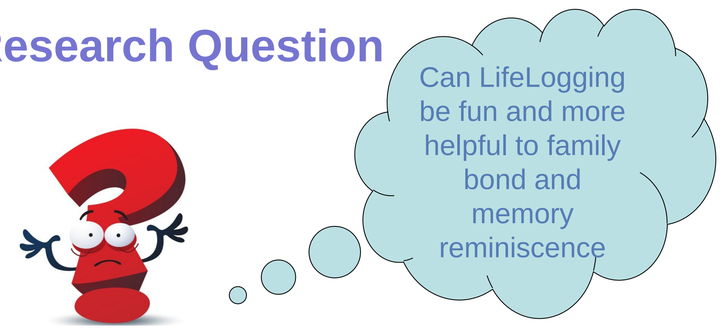
For Lifelogging based on daily life recording, management and sharing system, we design a procedure to segment a lifelog into different events based on image processing and sensor data analysis:
1) Analyze all sensor data and images, locate images and relevant sensor data and segment them according to dates.
2) Within a day, all sensor data will be segmented into events according to sensor differences (accelerometer, magnetometer etc.).
3) If a event contains too many images, this event will be split-up by setting threshold to lower values.

Main Visible Benefits of ShareDay

The benefits of developing sharing lifelog system based on event segmentation can contain the following aspects:

- Propose a new organization method for digitization of mementos
- Provide a new technique to support reminiscence by sharing family/group life log
- Provide a new source of personal information management for life streaming
- Provide an usable desktop tool for family life log.

Research Question



User Interaction with the ShareDay

ShareDay

We have designed and implemented an initial demonstrator lifelogging system based on event segmentation technique and personal/family memory reminiscence analysis and lifelogging data management. The main interface of the system is shown above. The users for our experiment will be families, group of friends, couples etc., all wearing SenseCams for a period of time.

MORE INFORMATION

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