Proximity Based Opportunistic Information Sharing and Privacy Protection

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Context

Location information is essential to location-based services (LBS), but also has the potential to reveal sensitive information about the users of LBS to malicious agents. Therefore, location privacy is an important issue to address for both users and providers of LBS. In this research, we investigate how location privacy can be realized in the context of a location-based service.

Challenges

- The importance of location privacy is not being communicated well enough with users.
- A lack of options (technological & legal) to support users of LBS regarding location privacy.
- A lack of studies on location information management and its impact on location privacy.

Action

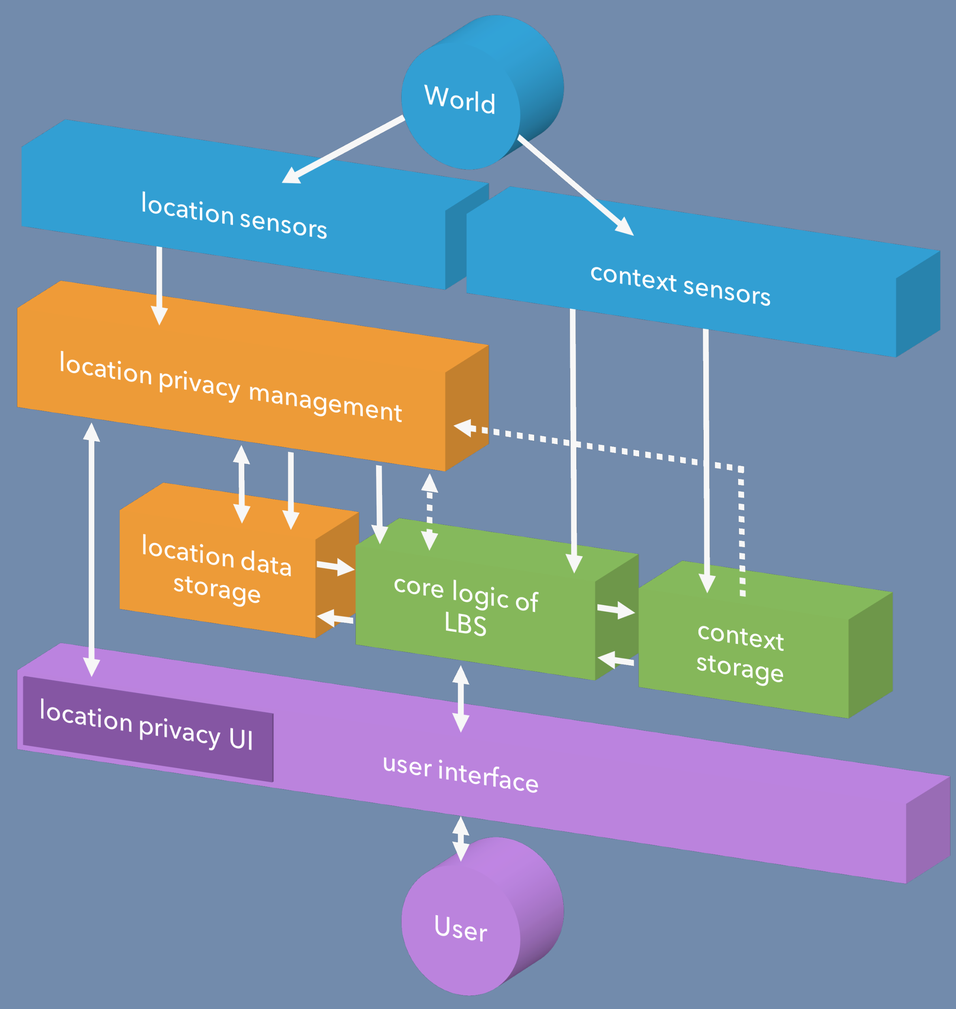
- Thorough literature review
- Concept development
- User study
- Design & Prototyping
- Evaluation

Impact

- Guidelines for developers to recognize and address privacy issues in the design and development process.
- Tools for users in order to provide a better understanding of location privacy and make informed choices to control their location privacy.

Result

- A conceptual model supporting location privacy management in LBS.
- User study to understand user's perception and needs for increased control of location privacy setting options.



Scaling up

- Methods to integrate location privacy protection in the process of LBS development with respect to privacy by design approaches.
- Location privacy protection strategy towards the design process of LBS, targeting both user and developer perspectives.
- Evaluation of how location information management should be conducted and how opportunistic information sharing can also assist with preserving privacy.

Consortium

Acknowledgements

The contributors gratefully acknowledge funding from the European Union through the GEO-C project (H2020-MSCA-ITN-2014, Grant Agreement Number 642332, http://www.geo-c.eu/).