SOFTWARE ENGINEERING

SWEN6307: Service Oriented Software Engineering

Assignment # 2

Designing a Service Composition Scenario

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Abstract

Geo-location – or targeting consumers by their location – has become an increasingly popular service. The opportunity to locate a person for a social cause has received considerable support by big social networks such as Facebook, yet it is not used intensively by members as it could be. In this course project, we will describe the achievements of a newly developed geolocation web application that focuses on both geolocation and the social aspect by enabling users to keep track of their friends' visited locations. The intended web application is based on existing location based market solutions. Considering the sensitive issue of privacy where users do not want to frequently share their location, PinLocation serves the purpose to provide users with a small-scale communication platform that focuses on their closest friends. With regards to the design and implementation, a client-server architecture was chosen. Finally, the combination of project objectives and other public domain projects served as basis for critical evaluation.

Introduction

Problem Solved

Geolocation - or targeting consumers by their location - has become an increasingly popular technology and continuously used trend by customers. As they have become accustomed to mobile phones and expect real-time, location-driven, context-specific user experience and engagement (Cyperalert, 2014) developers have striven to provide them with geolocation applications. Early successful examples in the geolocation market include *Foursquare* and *Facebook* Places, which provide users with a personalized local search experience such as for restaurants, airports and other popular places in a city that users than share with their community. The ability to share happy moments with peers and keep them informed about your current activity is an easy and convenient way of communicate with more than just one friend. Yet, *Facebook* is a quite large social network where users have sometimes thousands of friends. This has led to oversaturation in content and has risen privacy concerns. In addition, posts are often not relevant for all friends and can therefore elicit a feeling of annoyance. This is why users tend to post occasionally e.g. once a week/month to share special moments of their life rather than keeping the community updated on a daily base (Baer, 2015). In addition, a platform like Facebook offers more than one functionality including messaging, picture sharing, games etc. Ultimately, users do not associate the platform with 'the' place to share locations and inform friends where they are.
This has triggered our idea to provide users with a platform that focuses on geolocation as one activity. Users can share their current location with only their closest friends or those they want to share their location with for the purpose of socializing in a world where many friendships are digital and consumers travelling. In addition, they benefit from the application as a communication platform because they save individual conversations about what the users are currently up to and where they are located. Therefore, the idea of the geolocation service, named *PinLocation* was born.

Project Objectives

The objectives for this application cover a spectrum of functionalities which can be summarized as following:

Primary objectives

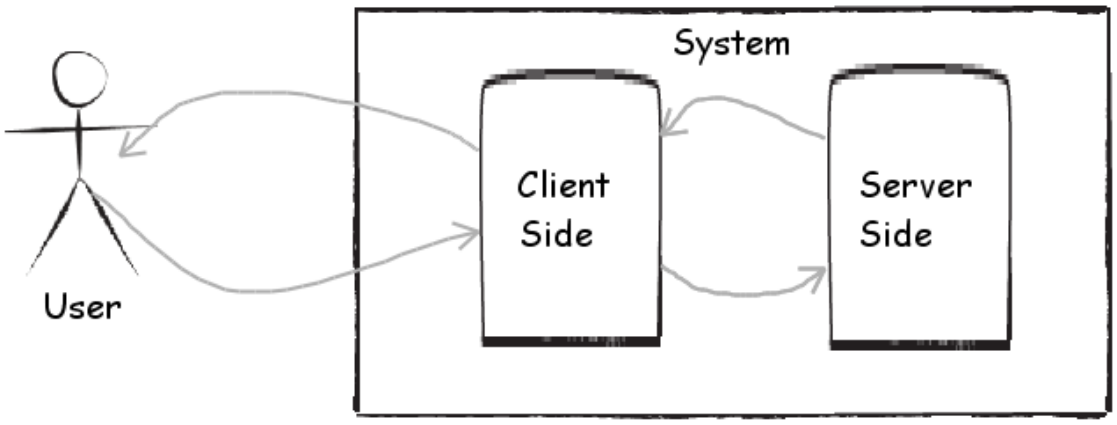
- Provide people who are unwilling to use current social media platforms with a new service that specialises in location sharing to connect them with their friends
- Develop a location based app that enables users to share their current location and allow other users to access this information.
- Share the current status with other friend circle members and enable other users to access this information.
- Provide user with the opportunity to view a map with friend's shared locations on it.

Secondary objectives

- Provide users with a good user experience when using and navigating through the application
- Apply good usability that stands in relation to the project time. This ensures that the interface is easy-to-use and the application functioning without major errors.
- Implement feedback messages, for example during check-in so the user knows if his check-in has worked out or during registration when the user has left blank fields.
- Allow the user to return to the same page he left the last time the application was used by using cookies.
- User can create a new place if it is not in the database yet.

System Architecture

Abstract View of System Architecture



System Architecture