Çankaya University
Faculty of Engineering

Computer Engineer Department

ceng 407 project presentation

Context - aware recommender system

ANIL KILIÇ

YILMAZ YILMAZ

Advisor: murat saran

Company Information

- **Çankaya University was established on July 9, 1997, by Sıtkı Alp education foundation in Ankara. The university began its teaching in the fall 1997 semester.**

Company Information

- **Çankaya University has 5 faculties with 21 departments; two institutes with 17 postgraduate master programs.**

Company Information

- **One academic year consist of two semester each of which includes at least 14 weeks. Lessons are designed for one semester**

Problem

- **Some people cannot decide what he/she can eat when they are hungry. There can be many choice but people have some difficulty when they want to eat something.**

Problem

- **According to the research, people who are hungry think what they can eat 10 – 15 minute. Especially it was observed that people who are in intensive school or work tempo is unstable when they are choosing food.**

Solution

- **To solve this problem, we did extensive research. We found some sample projects that are related to our project.**

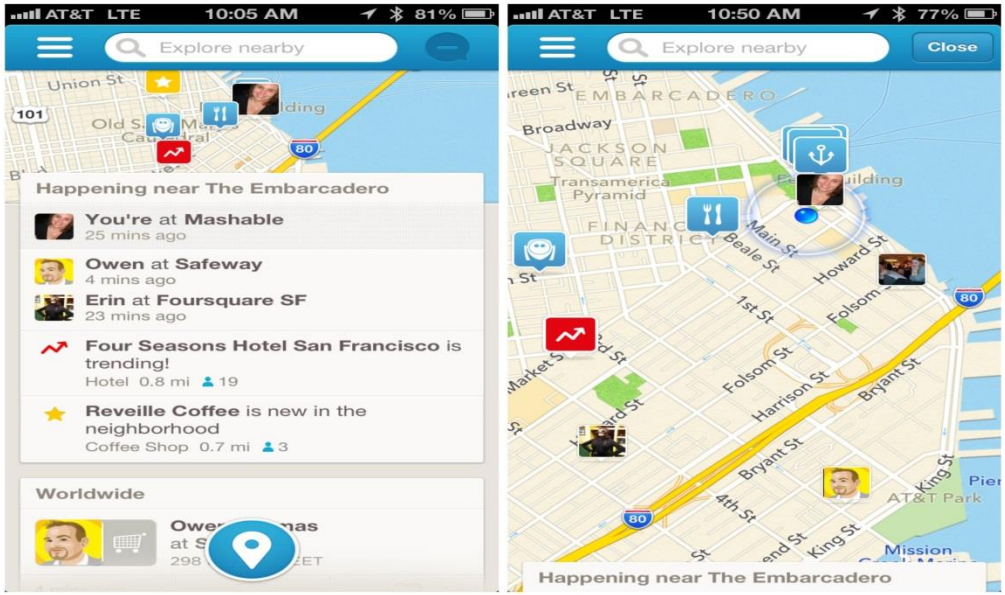
- **- Foursquare**
- **- Around ME**

Solution

- **Foursquare is a local search-and-discovery service mobile application which provide search results for its users.**

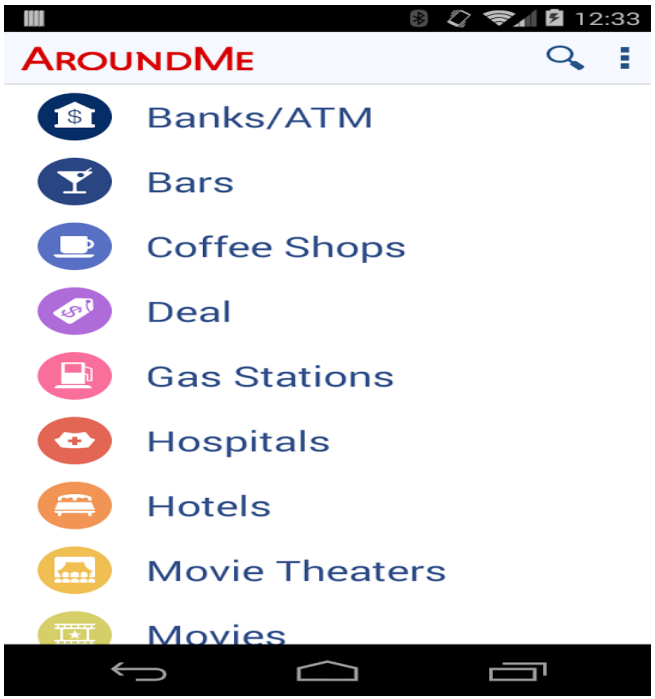
Solution

- **By taking into account the places where a user goes, the things they have told the application that they like and the other users whose advice trust. Foursquare provides recommendations of the places to go to near user's current location.**



Solution

Around ME is a mobile application for IOS, Android. This application allows users to quickly find nearby Point of Interest (POI) such as restaurants, hotels, parking and much more.



Solution

- **We also use these two applications and we observed that these applications has some lack, for example Foursquare recommend some restaurants to you, but it does not know which one is the best option for you.**

Solution

- **Our project is slightly different from these applications. In our project, recommendations will be define by using user's previous choices.**

Solution

- **This is called as context – aware recommender system. What is the context – aware recommender system ?**

Solution

- **Context is any information that can be used to characterize the situation of any person, place or object that is considered relevant to the interaction between a user and an application, including the user and application themselves.**

Solution

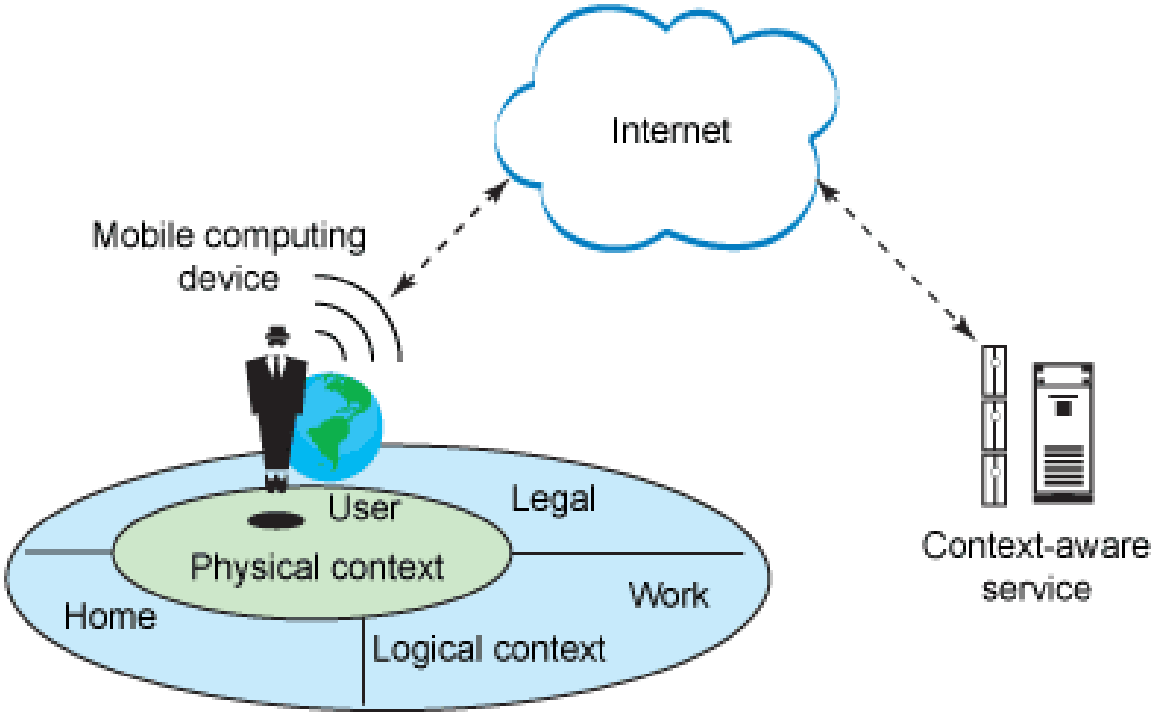
- **Example of contextual information are location, time, proximity, users status and network capabilities.**

SOLUTION

- **The key goal of context – aware system is to provide a user with relevant information and/or services based on his current context. This goal matches with the goal of recommender system.**

Solution

- **In our project, context – aware system has a major role. We will use this system to determine food habit of users.**



Solution

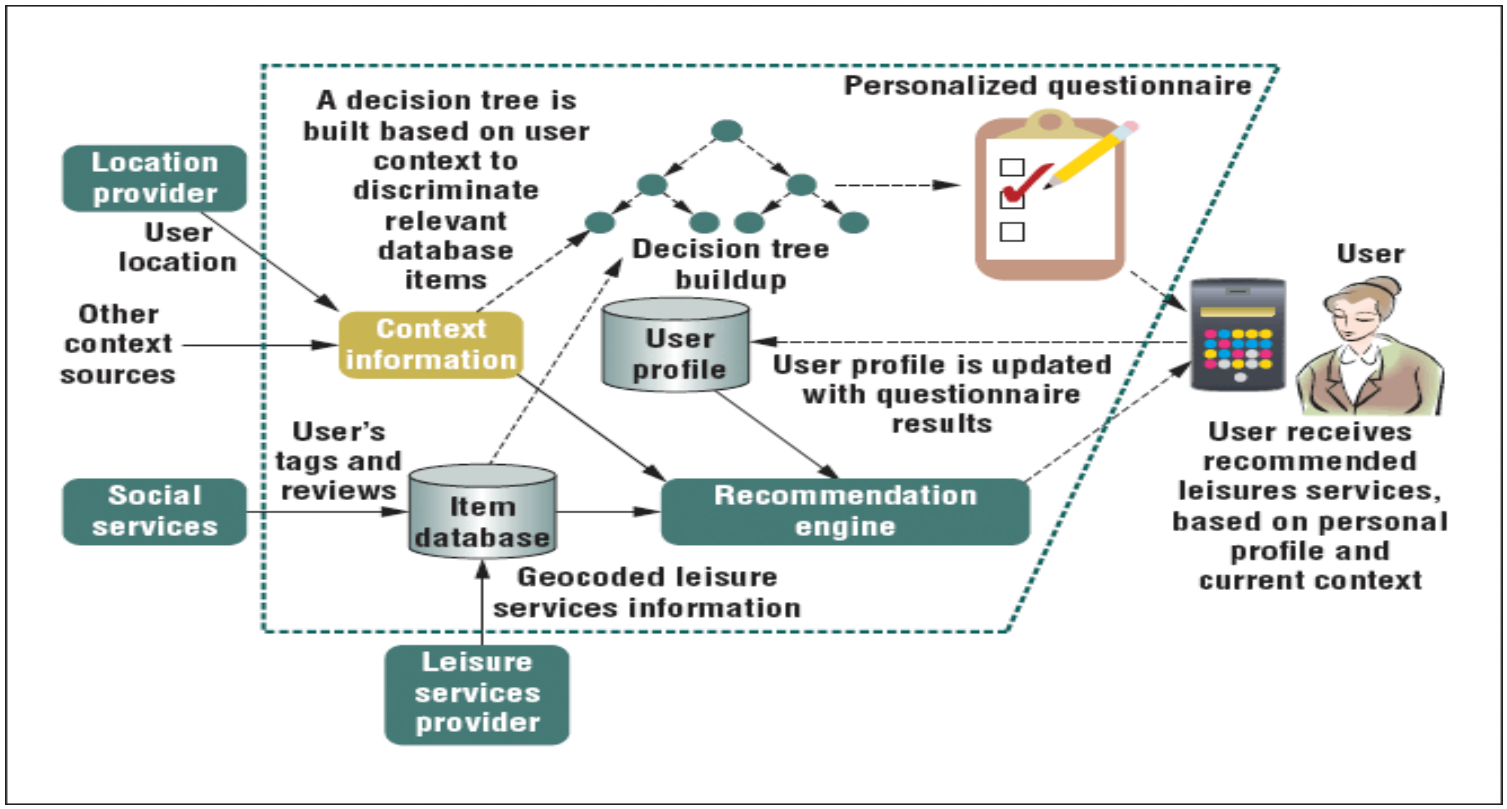
- **In register page, user will report his/her general information to system.**

Solution

- **After that user will report his/her general food habit to system. For example, a user can report his/her breakfast habit with some checkbox, as you can see in the figure, user will select some food.**

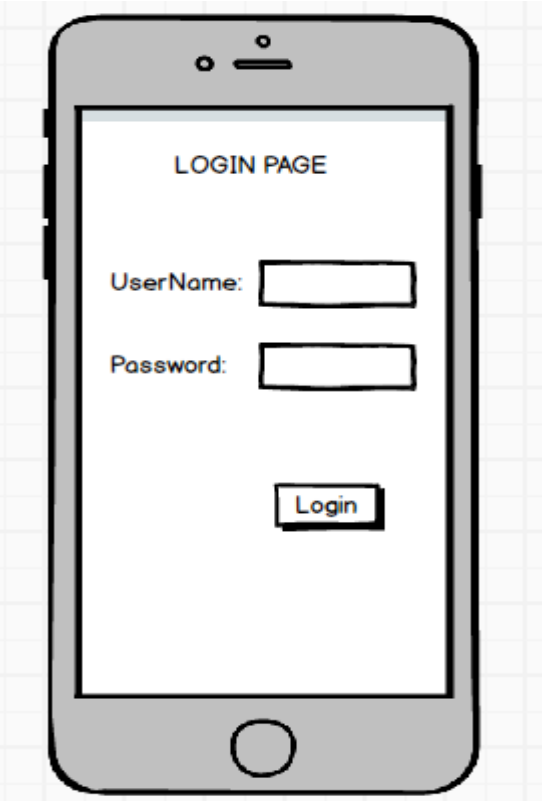
Solution

- **According to this choice, user's profile will be specified. Main differences of our project is that using this context – aware system.**



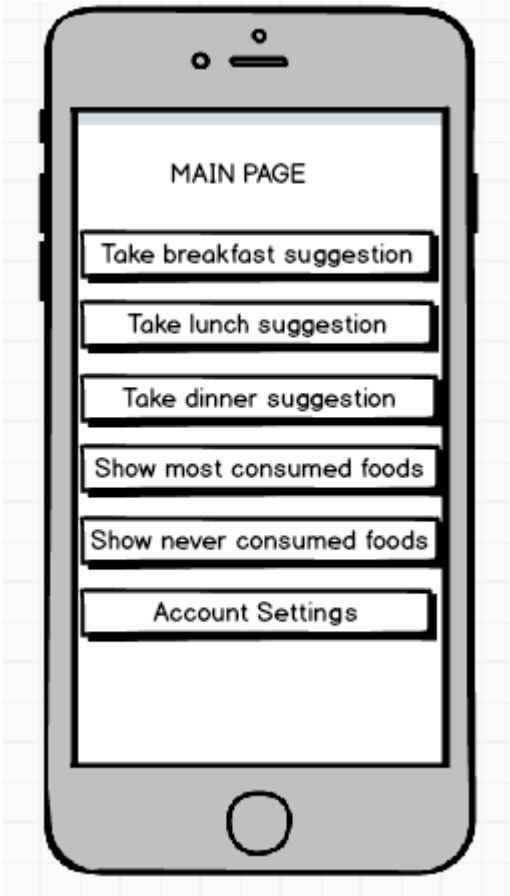
Solution

- **After register operation, user will be directed to login page. If user enter valid information, error message will be shown.**



Solution

- **In main page, user will choose repast type that user want.**

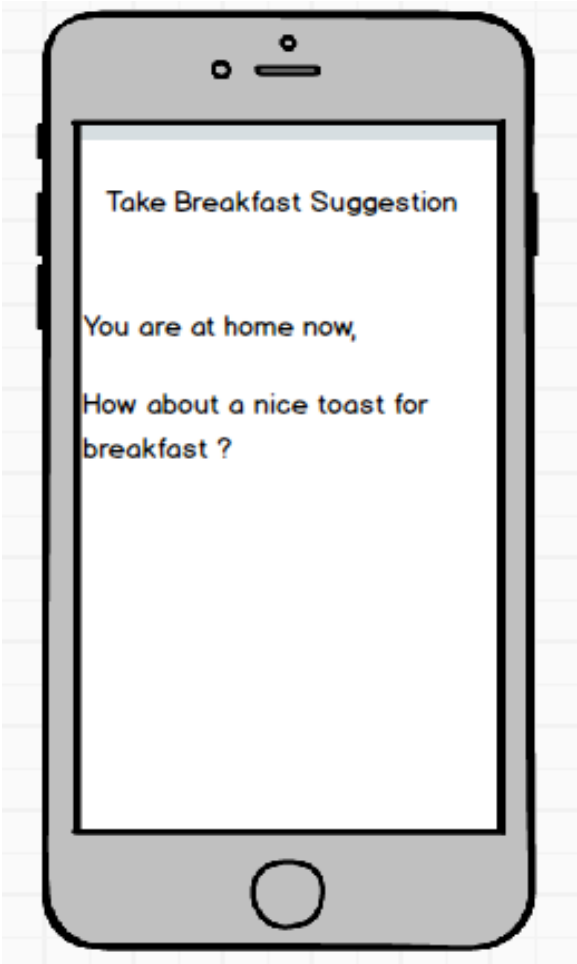


Solution

- **Application will ask where user want to eat. If user want to eat food at outside, application will ask a permission for location information.**

Solution

- **After user's choice, recommendation will shown to user.**

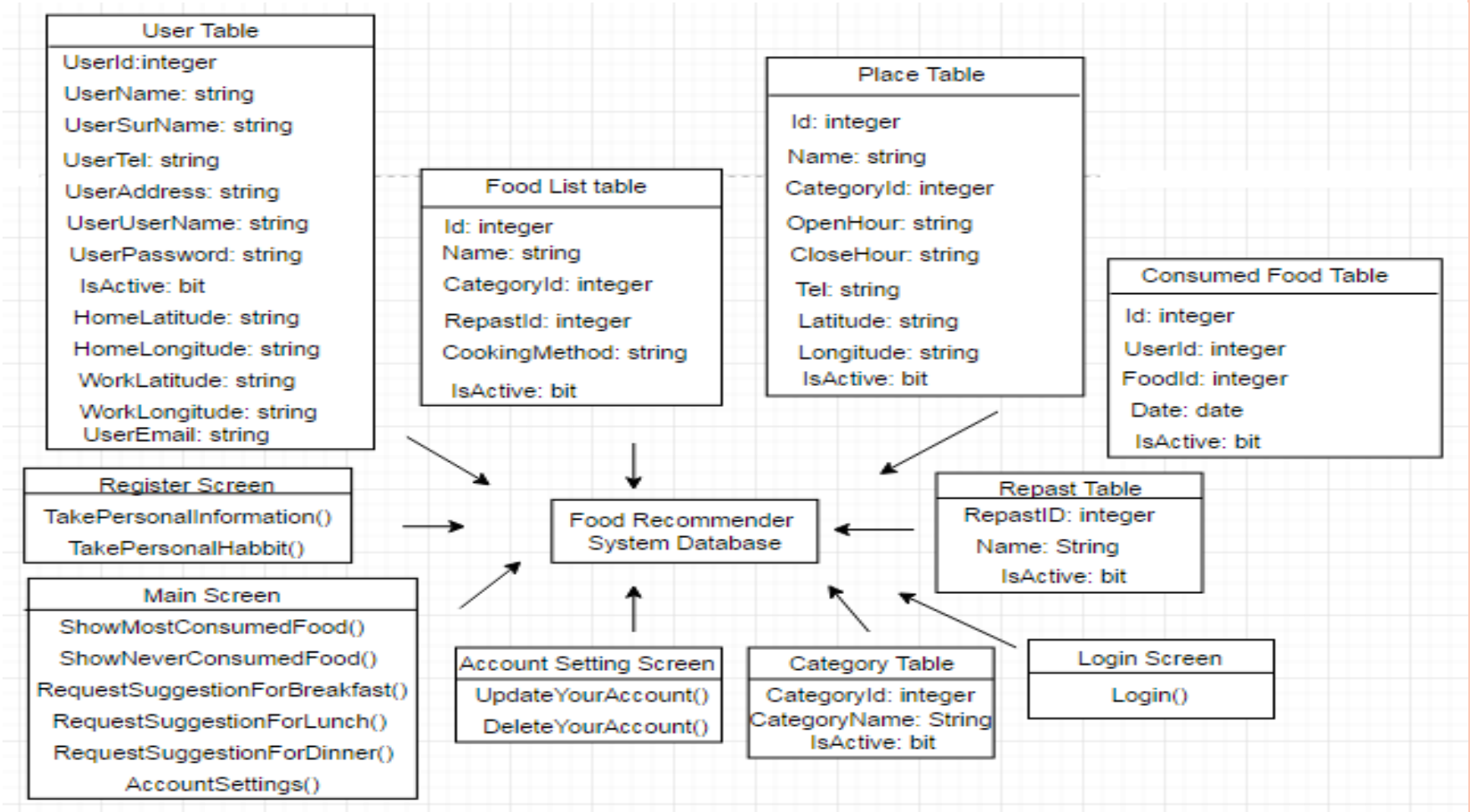


Solution

- **Which technologies will we use in this project?**

Solution

- **We will use MSSQL for database in this project with this way, user's information will be stored.**



Solution

- **We will use Android Studio to design application screens.**

Solution

- **We will use C# WCF web service to operate between application and server.**