<Project Proposal Document>

<METU Community Service>

< Rebellion>

December 29, 2013

Team Members:
1) Barış GÜVERCİN, 1746031, bbrs.guvercin@gmail.com
2) Burak ÇELİK, 1746536, burcelfl@gmail.com
3) Eren Deniz ÇELEBİ, 1746528, erendenizcelebi@gmail.com
4) Taylan İsmail DOĞAN, 1819259, ttaylan.dogann@gmail.com

1. Problem Definition and Background Information

In our daily lives, there are a lot of things that we have to take into account. And basically, it is difficult for us to reach out every piece of information that we need. Since we believe that it should be an easier process, we aim to solve this issue by providing easy access to some services here in Middle East Technical University, with our project, METU Community Service.

The problem is, it is really frustrating and time consuming to access information from different sources. For this particular project, we will be dealing with this problem precisely inside the Middle East Technical University campus. We believe that residents, workers and students of METU experience this problem.

It seems that Mahir Kaya, an Android developer, have developed an Android application, named "Mobile METU" to solve this problem. Even though this application may seem similar to our project, it lacks some other services that we wish to provide.

We have recently made some brainstorming about this issue. We have talked about what kind of services that we will provide, since it is the backbone of our project.

2. Significance of the Problem and Motivation

The platform that the software will be built on could be a challenging task since we do not have much knowledge in designing smart phone applications. Also, the calendar part of the application could be challenging because all the information about the date and time of the events are not in some particular area. We need to fetch those data from different locations.

<METU Community Service>   <Rebellion>

The reason that we wanted to develop this project is that some time ago we thought there may be an application to show the nearest ring in the campus. With this thought, we considered what could be done to improve this to the next level in order to help the people who live inside the campus. We have had the idea of designing an event calendar contains items like academic calendar, activities in the METU Culture and Convention Center. Moreover, the daily food choice made by METU Cafeteria can be shown to users via a widget.

We are planning to release the application for iOS and Android platforms. Our main target for this app is the people living inside the campus. Since the majority of them who will use the application are students, we plan to make the app free to download since the most of the students do not have an actual income.

3. Draft Project Plan

Basically, we are planning to solve this problem by fetching necessary information from different sources. For example, if a user wishes to learn about what is on the menu for the lunch, he/she will simply click on the corresponding icon or part, in order to get what he/she needs.

The end-product will be a mobile application that runs on both Android and iOS platforms. It will also have a neat user interface so that ease of use will be achieved. Also, the users will be able to choose the services that they are in need.

As mentioned, users will get desired information by clicking the personalized list of services. Moreover, the event-based system they have chosen will inform them about the announcements and urgent situations.

Actually, we are going to support each other throughout the project. But mainly, the distribution of the major tasks will be like this:

- Burak Çelik - Graphical User Interface

- Barış Güvercin - Android Application Development

- Deniz Eren Çelebi - iOS Application Development

- Taylan Doğan - Design & Data Arrangement

Firstly, the customer will download our application to his/her smartphone. After downloading and installing the application, he/she will be able to access the desired information through services (Figure 1) via internet.
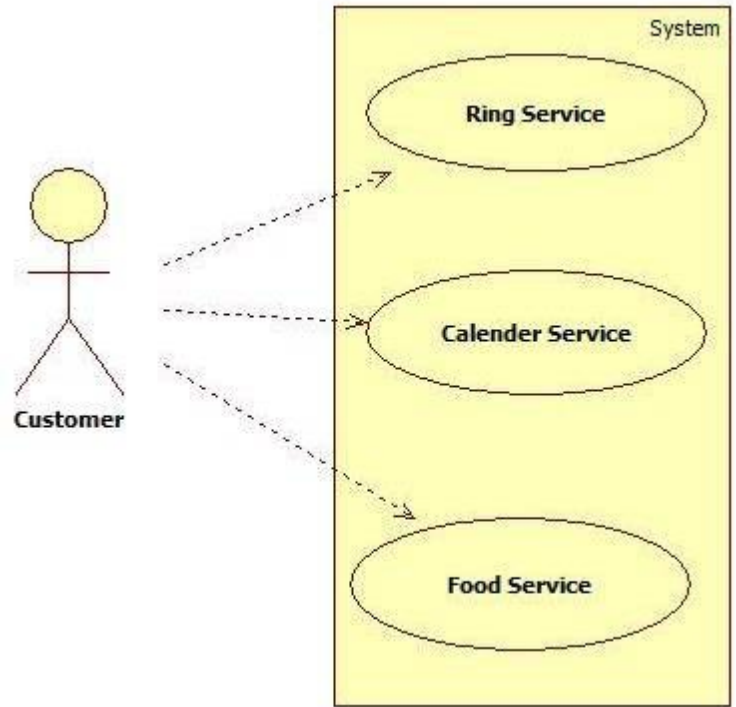
Figure 1. Use Case Diagram

The model fetches the desired data from database. The controller manipulates the received data according to the customers' desires. And view basically shows the desired content to the customer. A more detailed version of the approach can be seen in Figure 2.

For the iOS platform, we will be using Objective C as the programming language. And Android SDK will be used in the development of the Android application.

And as stated above, Burak Çelik will be responsible from the graphical user interface, namely the view module. Taylan Doğan will be mainly dealing with the data. So, he will be working on the data module. And finally, Barış Güvercin and Deniz Eren Çelebi will be working on both model and controller modules.
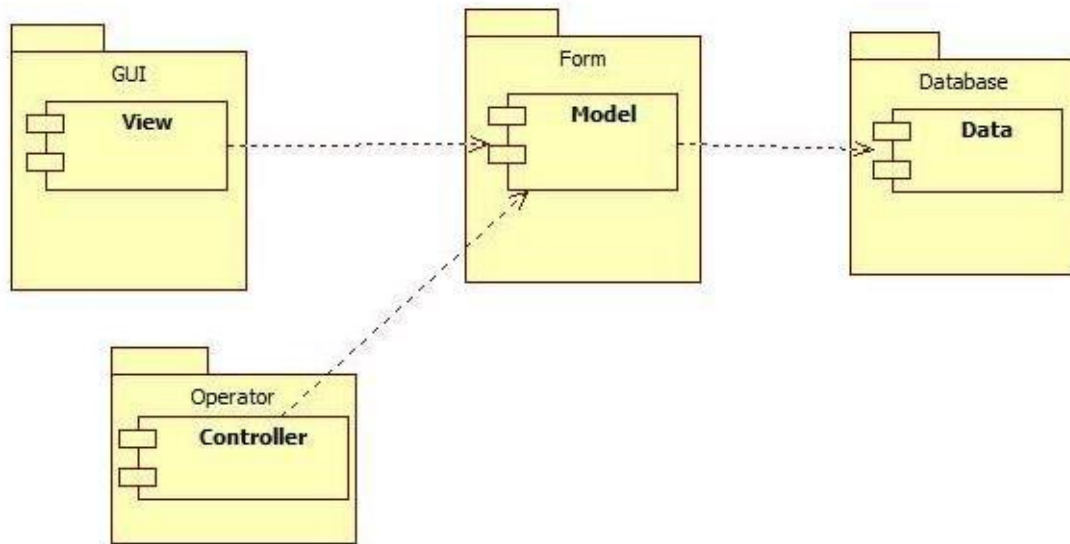
Figure 2. Component Diagram

The customers will use their smart phones to connect services like food service, calendar service and ring service. Each of their data is in another database. Our job contains fetching these data and showing it to the user through smart phone application. (Figure 3.)
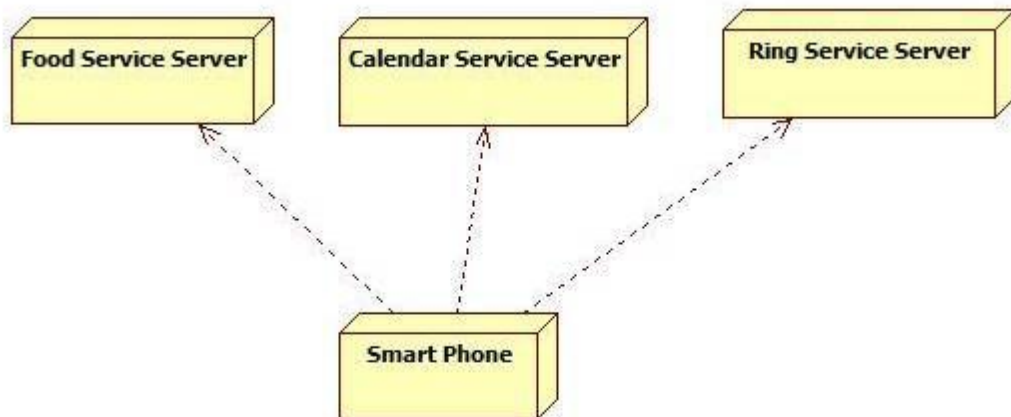

Figure 3. Deployment Diagram

4. Support

Dr. Attila Özgit, who is currently an academician of Middle East Technical University, Department of Computer Engineering, will be advising us throughout the project.

5. References

https://play.google.com/store/apps/details?id=com.mobilemetu.client.activity&hl=en