**ESKİŞEHİR TECHNICAL UNIVERSITY**

**ENGINEERING FACULTY COMPUTER ENGINEERING**

**BIM 423**

**SOFTWARE ENGINEERING**

**FALL TERM SEMESTER PROJECT REPORT**

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**Group No:** 5

**ABSTRACT**

We will solve the problem of small, mid and heavy scale, individual transportation with a mobile application. In today’s standards transportation is heavy scale. We aim including people who want to operate their personal vehicles to the system. People who participate in our application with their personal vehicles will enforce their tariffs to small, mid and heavy scale carriage. The vehicles that they will use, size of the transportation and the prices will be set by themselves, and the people who need carriage can select freely their services.

A user can give scores and add reviews to the carrier, in this way other users can make a more effective selection from the list of services. With this application, we unite carriers and the people who need a carrier, with the app created for them.

**INTRODUCTION**

We designed an application that allows customers and service providers in the transportation sector to meet with each other easily. The program allows users to find quality and reliable companies regardless of the size of the job. The most important advantage of the application is that customers can get many offers for transportation and have the opportunity to choose the most suitable one among these offers. In short, a user who wants to receive services from the transport companies will create a request containing the necessary information and will receive offers from the companies and then they will be able to select the best offer from the carriers.

a. **Project Title**: Easy Carry

b. **Project Definition**: The main purpose of this application is to gather people who need transportation and transporters. There will be alternatives for finding transporters or providing transportation services. It is available for all devices that support Android 4.0 or higher.

c. **Project Goal**: The aim of the project is to make the life of users easier and to offer new alternatives in the field of transportation.

• Offering a variety of carriers

• Providing special service as customer’s need

• Creating a platform for carrying area

• Forcing carriers to compete

d. **Project Scope**: In this project, we've tried to spread our workforce on an equal weekly basis. We finished our project in eight weeks with constant progressive logic, also most importantly we’ve completed every task on the requirements, list in this eight-week period. As a result of our efficient work, we designed application that our users use and utilize while using.

e. **Application Areas**: Our project is an app for carrying, so our application area is users who need this service. There is no certain user profile. Anyone who likes to use and needs this application.

f. **Background**: There is no application about carrying in the market. Unlike the other apps that our app only focus carrying and forcing the carriers to compete.

• Carriers create notices and specify their schedules, prices, and locations

• Customers searches among carriers

• The application shows available carriers and their specifications

• Customer get contact with the carrier

**The necessity of the Project**

• There is no application for only carrying

• Other applications do not focus on carrying

• Reaches users via android application

• Users are separated as customers and carriers

• Carriers create notices and specify their schedules, prices, and locations

• Customers searches among carriers

• The application shows available carriers and their specifications

• Customer get contact with the carrier

**2. Team Organization**

**Şerif Fırat Kara**: Backend Developer & Web Developer & API

**Ahmet Salih Topçu**: Frontend Developer & Documentation

**Yakup Yılmaz**: Backend Developer & Documentation

**Yiğit Mustafa Güney**: UI Design

**Süleyman Zorbey Yıldırım**: UI Design

**Sami Hayatsever**: Frontend Developer

**3. Project Schedule**

|  |  |
| --- | --- |
| PROGRESS | DEADLINE |
| Login screen and sign up form will be created. | 28.10.2018 |
| Temporarily casual carriers will be created. | 11.11.2018 |
| Users will be able to search for carriers. | 25.11.2018 |
| Interface will be designed. | 09.12.2018 |
| Matching and filtering will be optimized. | 23.12.2018 |

**1. Process Model**

We chose an iterative model for this project. Iterative model is based on designing and implementing a part of the software roughly to clarify it later. Each iteration improves the software and specifies how will the final result be. Since our project is a game, the main requirements should be defined clearly but some details might evolve with time. So that iterative model was the best process model for us.

**2. System Requirements**

**Functional Requirement List**

• Our Project will support only Turkish Language for now. (English can be added later).

• Our Project will include pages for every carrier who carry users ware.

• There is a scoring system for every carrier. So, the users who carried their ware can give points the carrier.

• Users should be able to share their things what they want to carry.

• According to user’s location, users should be able to find carrier nearby.

**Non-functional requirement list**

• **Performance**

One of the main goals of our Project is to provide maximum performance to the user. We will use Android studio which is statistically best and richest software to provide this purpose.

• **Scalability**

Our project will be available to all end-users on the Android platform. There are over 2 billion Android devices in the world. That's why scalability is high.

• **Security**

We back up our whole data every day, so if there will be any kind of attack, we can just load the latest backup and continue. In addition, users’ and administrators’ data are stored in encrypted type.

• **Maintainability**

With the feedback we receive from users, the bugs of the application, if any, the optimization problems will be fixed or added a feature with the next update. And additional features that may come along with updates will ensure the maintainability of the application.

• **Usability**

The use of our project will be simple and basic for the user. The simple and clear menu design and the designated color palette will be designed so that it will not exhaust of the eyes of the user. Deep but not complex application designed for not confuse to user’s mind.

• **Availability**

The user will be able to use it actively without any other requirement as long as he installs it on the phone. At the end of the semester, the project will be available at the Google Play Store.

**1.Use Case**

1. **Usage Scenarios**

-The user registers to the system with e-mail

-The user updates his/her own information

-The user share his/her ware on application

-The user can add carrier as favorite

-Users message between themselves

-The user deletes his/her ads

-The user updates his/her ads

-The user see his/her ads in my ads

-The user can feedback on application

-The user exist from the system

1. **Use Case Glossary**

**Creating account :** Users can create her/his own account with e-mail

**Add ads :** System allows Users to add ads

**View ads :** System allows users to view ads

**Update ads :** System allows users to update ads

**Delete ads :** Users can delete their own ads

**Feedback :** System allows users to feedback

1. **Use Case Diagram**
2. **Use Case Scenarios**

To achieve all use cases successfully, one must turn on the internet on their devices as a pre-condition.

**Use Case Name:** Register to the system

**Actor:** The user who is not registered to the system

**Trigger:** User wants to register the system

**Pre-Condition:** Application must be opened by the user

**Post-Condition:** The user is recorded to the system

**Normal Flow**

1. The unregistered user opens the application
2. The user selects register page
3. The system asks the unregistered user about the required information for registering
4. The unregistered user enters the information
5. The system checks the entered unregistered user’s information
6. The system records the user

**Altarnate Flow**

4A1. The user enters an e-mail but it’s already in use.Therefore system doesn’t accept user’s informations.

1. The system ask for the user’s e-mail again
2. The user enters the correct e-mail
3. The use case returns step 4

**Use Case Name:** Add ads

**Actor**: Registered user

**Trigger:** The user wants to add ads

**Pre-condition:** The user should be logged in to the system

**Post-condition:** The ads will be stored in the system

**Normal Flow**

1. The user selects add new ads
2. The user fills the required information blanks
3. The system checks the information about the ads
4. The system stores and publishes the user’s ads

**Alternate Flow**

3A1. The user may be given invalid information

1. The system asks user to enter valid information
2. The user enters the correct information about news
3. The system checks about the ads information
4. The use case return 3

**Use Case Name:** Message

**Actor:** Registered User

**Trigger:** User wants to message to other users

**Pre-condition:** The adds must be seen by the user

**Post-condition:** The mesaage are sent to the other user

**Normal Flow**

1. The user selects the user he/she wants to message
2. The user message to other user
3. The system sends the messages to the user

**Use Case Name:** View the ads

**Actor:** Registered user

**Trigger:** User wants to see the other user’s ads

**Pre-condition:** The user should be logged in to the system

**Post-condition:** The ads is shown to the user by the system

**Normal Flow**

1. The user opens the application
2. The user enters the ads page
3. The system shows the ads

**Use Case Name:** Update information

**Actor:** Registered user

**Trigger**: The user wants to update their own information

**Pre-condition:** The user should be logged in to the system

**Post-condition:** The updated information is stored to the system

**Normal Flow**

1. The user selects his/her own profile page
2. The user selects update profile button
3. The users enters the information
4. The system checks the entered information
5. The user will update the information
6. The system stores the update information

**Alternate Flow**

4A1.The system determine that the information is invalid and cancel the update.

1. The system didin’t accept the user update
2. The user enters the correct infortmation
3. The use case returns 4

Use Case Name: Edit ads

Actor: Registered user

Trigger: user wants to edit ads

Pre-condition: The user should be logged in to the system

Post-condition: The system will edit users ads

**Normal Flow**

1. The user selects his/her ads
2. The user selects edit ads button
3. The user enters the info about ads
4. The syste checks the entered information
5. The system stores and publishes the edited ads

**Alternate Flow**

4A1.The system will determine that if the some information are invalid and system will cancel the edit.

1. The user enters the info about edit ads
2. The use case returns step 4

**Use Case Name :** Delete ads

**Actor :** Registered user

**Trigger** : The user wants to delete ads

**Pre-condition :** The user should be logged in to the system

**Post-condition :** The chosen ads is deleted from the system

**Normal Flow**

1. The user selects his/her ads
2. The user selects delete ads button
3. The system asks the user if he/she is sure or not
4. The system confirm user’s action
5. The ads will be deleted from the system

**Use Case Name :** Feedback

**Actor :** Registered user

**Trigger** : The user wants to give feedback

**Pre-condition :** The user should be logged in to the system

**Post-condition :** The feedback is sent to the system

**Normal Flow**

1. The user selects feedback button
2. The user feedback about application
3. The feedback is sent to the system

**CONCLUSION**

On these days, people spend most of their time with their mobile phones. Also, people are able to get most of their needs online. We saw that there is no application focused on gathering service providers and people who need a carrier.

In the project, the main aim is to ease finding a carrier for users. When doing this, we also wanted to provide them a chance to choose among the options. They will be able to search for their filters and get the best match. By this way, finding a carrier will not be a problem for people, they will only think about the best match.