# Document:

# Software Design Description

# *Project:*

# *TicToc Courier*

# Table of Contents

# 1.INTRODUCTION

## 1.1 Purpose

Purpose of this document is to present design Description of **TTCS**. This document contains diagrams how to login and signUp the app and corresponding static and dynamic behavior as well.This document describes the features of this app and also design constraints under which this app must be used. It also describes the stakeholders for whom this document is intended for. This document contains pictorial represention of the **AFS** about all the Functional and non-functional requirements of **TTCS.**

## 1.2 Scope

**TTCS** is an android based application that provides the facility of getting stuff from place A to place B with respect to Time  Travel date, Source and destination of the trip.
It also facilitate user to search for multiple choices to choose if person A is not comfortable with person B than he/she has N number of people who travel across the same cities in daily basis.
It will not only help people to sending their material but saving the money and most importantly the time and effort as well.

## 1.3 Definitions and Acronyms

1. The font used in this document is Times new Roman.
2. Font size is 12.
3. Font size for headings is 14 and they are bold.
4. Bold word in description is the name of App.
5. Underlined and bold Words are subheadings.
6. All the text is in black color.
7. 'Shall' is used to show that the specified functionality is necessary.
8. Every part of this document follows the labeling convention for listing of its Features.
   Labeling is as follows:
   - FE(feature) in project Scope
   - POB in Project objectives
   - HC in Hardware Constraints
   - SC in Software Constraints
   - CC in Cultural Constraints
   - HOE in Hardware Operating Environment
   - SOE in Software Operating Environment
   - AD in Assumptions and Dependency
   - HI in Hardware Interface
   - SI in Software Interface
   - CI in Communication Interface
   - UR in Usability requirements
   - PR in Performance Requirements
   - SR in Security Requirement
   - ROB in Robustness.

# 2. SYSTEM OVERVIEW

## 2.1 Project Background

In our society, so many people travel to some destination to send his/her materials to utilize their resources to the requested destination and
bear the expense only for themselves even after having the services they have(TCS,leopards) other people who uses those services for utilizing their belongings at desired destination.
In existing Courier Services,people have to pay the more than reasonable amount of money even for the single sheet of paper(CNIC,bank_check etc).

They need to go to take out time from their busy schedule to the offices for their request that they want to proceed or most probably we need to take out the time for receiving purpose of the stuff we requested for visiting their offices.

On the contrary,people don't get their stuff by the time of they desire but by the will of courier services,whenever their van got full than it's departuring to a destination starts which require at least two days.

These sort of problems cause the serious situation which effects the wastage of time,money,covering greater distance for request.

"TTCS" is the solution to those problems. It is a mobile app through which users can easily Have their belongings with them without taking enough time.People can post over the app when they are likely to go in which city A to city B,intrested people will have to go and avail their service of taking materials they want to send.

## 2.2 Project Scope

**TTCS** is an android based application that provides the facility of getting stuff from place A to place B with respect to Time  Travel date, Source and destination of the trip.
It also facilitate user to search for multiple choices to choose if person A is not comfortable with person B than he/she has N number of people who travel across the same cities in daily basis.
It will not only help people to sending their material but saving the money and most importantly the time and effort as well.

**TTCS** is very helpful for people who don't afford the enough charges of  TCS services at current era and for those who have busy schedule and hard for them to take time for sending and recieving stuff from different cities.It is very easy simple and efficient way of utilizing the resoucres of digitize world at your pocket.

**FE-1** Application allows the user to authorize himself for using services of the application by giving his details which includes name, phone number, email, CNIC, Image.
**FE-2** Application allows the user to multiple carrier at the same time.

**FE-3** Application also allows the user to unique code which can be verify by sender/reciever and carrier.
**FE-4** Application shows the details of request one made.
**FE-5** Application also allows the user to share the timing of departuring from city A to city B.
**FE-6** Application allows the user to contact and over app with whom request is made and who is intermediate potential person.
**FE-7** Application shall allw to store the information(CNIC photo, contact no) till the request is not done.
**FE-8** Application also allows the user to give frequency of stars or endorsedment based on the service of carrier.

## 2.3 Not in Scope

Appointment management or price management is not concerned with this project, people may contact with each other through chat, mail or number to set their meeting time or price for the service which will be decide by time temporal according to the users needs.

## 2.4 Project Objectives

**POB-1** Save time of people by:
Allowing them not to bother themselves to go offices for sending or recieving stuff.
**POB-2** Reasonable amount of money even for a single sheet of paper,cheque and etc.
**POB-3** Relatively faster than other services, they can get their stuff within 7-8 hours(Ex:- karachi to sukkur)at their hand.

## 2.5 Stakeholders

| Stakeholers | Description |
|---|---|
| General Public(carrier) | Any person who wants to carry the material he/she has to post over the app before the one day of departuring.Rest of the user can see and make reuest (if possible) |
| Sender/Reciever | Any one who likely have to have their materials would be reciever.<br>Sender can be his/her relatively or it may be the carrier who is willingly to take their belongings with him/her. |

## 2.6 Operating Environment

### 2.6.1 Hardware

**HOE-1** The system will run on Android devices that are connected to internet.
**HOE-2** Camera is also used for capturing image while registering as a member.
**HOE-2** Camera is also used for capturing image of sender/reciever,carrier CNIC's.

### 2.6.2 Software

**SOE-1** This application will run on Android OS.
**SOE-2** MySQLLite database will be used in this app
**SOE-3** App can be run on android version 4.3 lollypop or above.

## 2.7 System Constraints

### 2.7.1 Hardware Constraints

**HC-1** System will run on smart phone.

**HC-2** Smart phone must be connected to internet.

**HC-3** Camera must be in working condition while capturing image for registering as a Member and for CNIC capturing as well.

### 2.7.2 Software Constraints

**SC-1** System must run on android operating system.

**SC-2** Android version must be 4.3 lollypop or above.

### 2.7.3 Cultural Constraints

**CC-1** English language will be used in this software.

### 2.7.4 Legal Constraints

**LC-1** In case of breaking the damage and not delievering belongings at the desired Destination.Seriously action will be taken by owning authorities.

### 2.7.5 Environmental Constraints

Not applicable

### 2.7.6 User Constraints

**UC-1** App should be more user friendly and which pleases user when he/she uses it.

## 2.8 Assumptions and Dependencies

**AD-1** User should have sufficient knowledge of android OS.

**AD-2** Device must be connected to internet to avail the services of this app.

**AD-3** The users know the English, as this App will be provided in English language.

# 3.0. Architectural Design

## 3.1. Design vocabulary

Model:

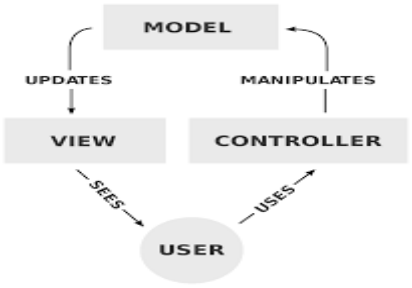
Model is responsible for maintaining data and business logic of the Application.

View:

View is responsible for displaying data to the user in the particular format. View is the user interface of the system which maintains the position of the data to be displayed.

Controller:

Controller is a request Handler which is responsible for responding the user inputs and controls the interactions between the Model and View. It receives the input from user, validates the input and perform appropriate operation for it.



### 3.2 Constraints

#### 3.2.1 Hardware Constraints

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#### 3.2.6 User Constraints

**UC-1** App should be more user friendly and which pleases user when he/she uses it.

## 4.Benefits of Architecture

4.1.User Portability System will be portable and can be run on different versions of android. Version should be 4.2 or above

4.2. Reusability: data models, functions and design of the app will be reusable as these don't depend on each other and they are kept separately in application

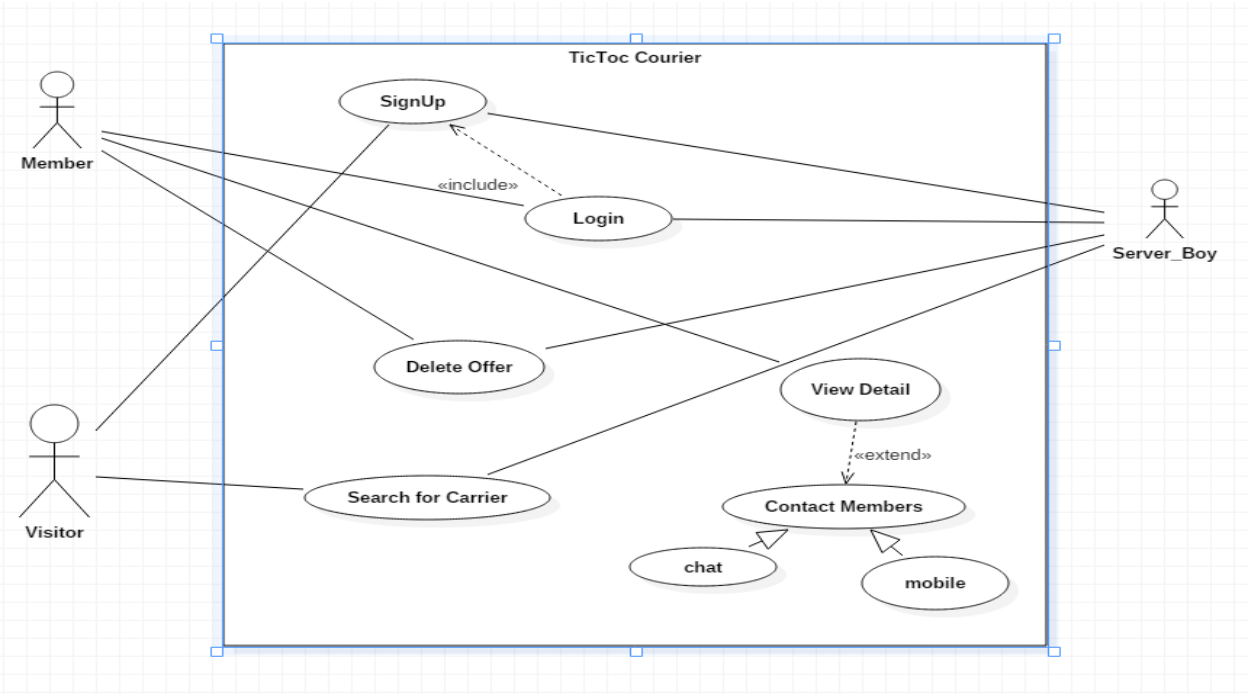
4.3. Integrability:This architecture is very useful as even the components like data, design and operations of the system are kept separately in application, still they can be integrated to work correctly together

4.4.Understandibility:

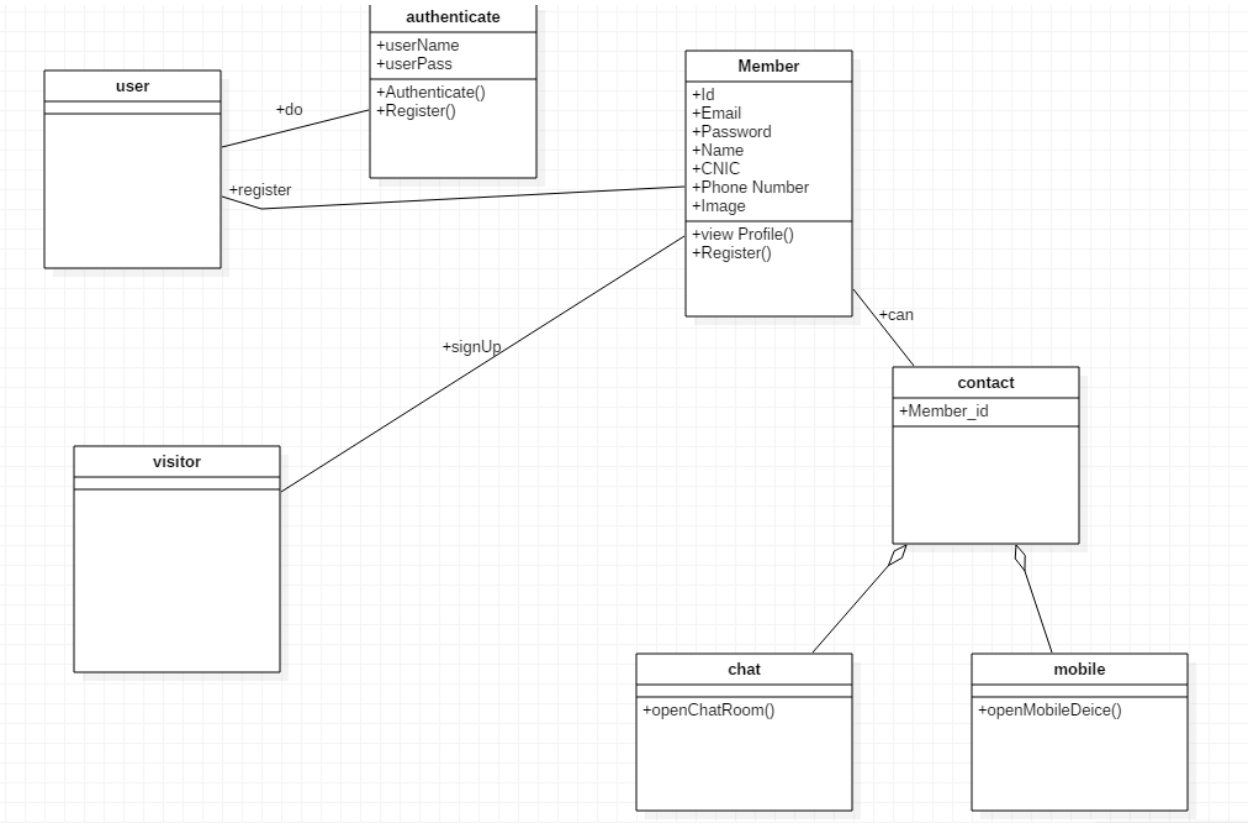
Each part is separated from others, Anyone can understand it by seeing it which work is going on without getting help from others.

# 5.Static Structure of System:

## 5.1 Use-Case Diagram

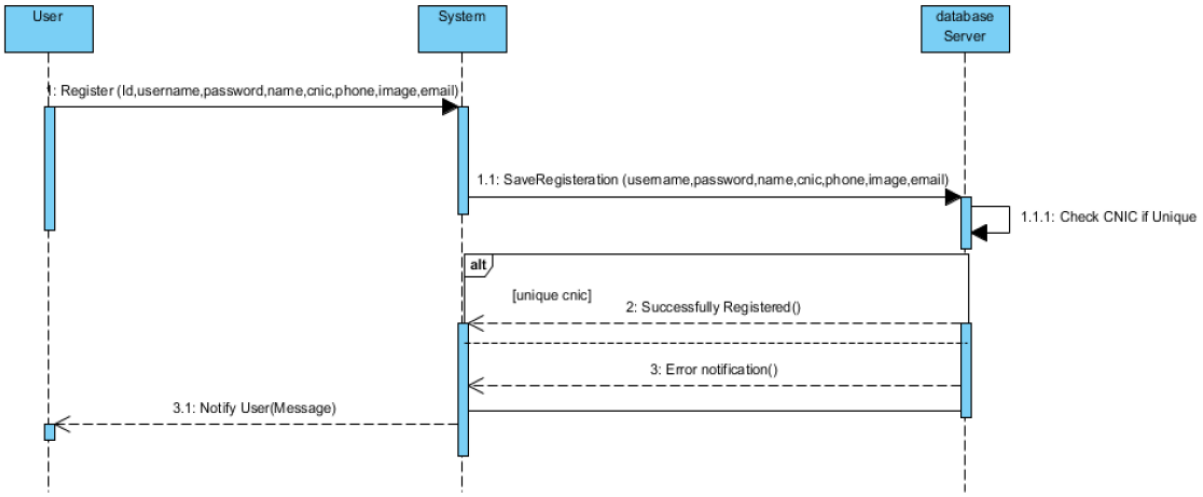


## 5.2.Class Diagram:

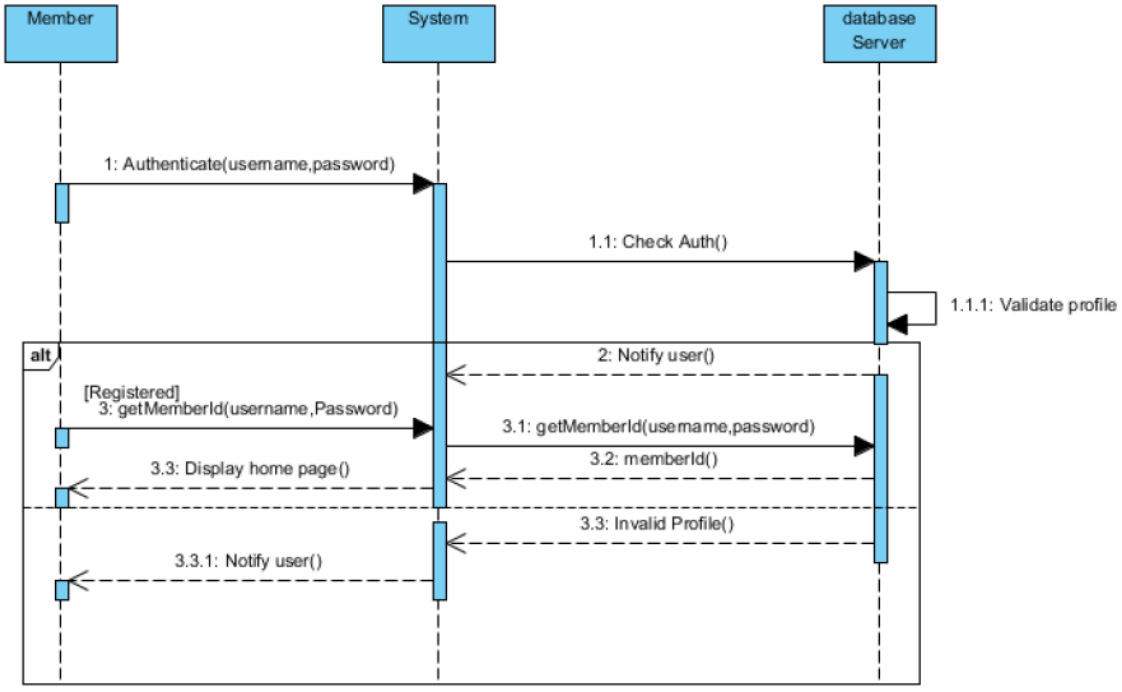


# 6.Dynamic structure:

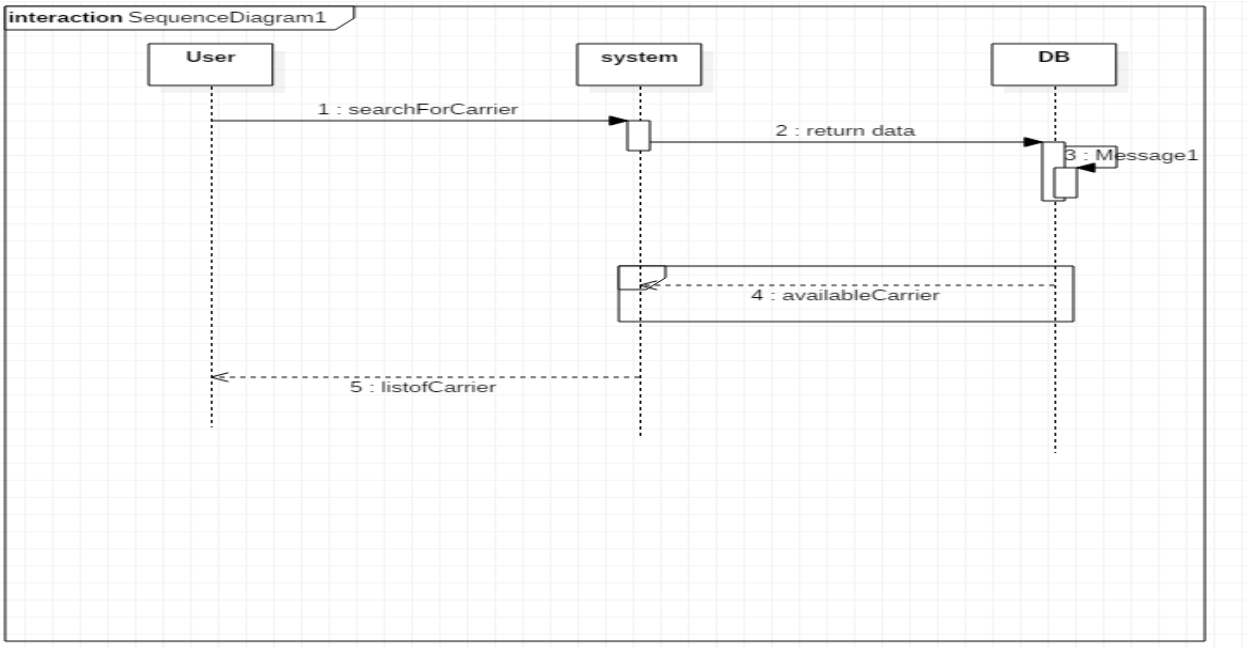
## 6.1 SignUp



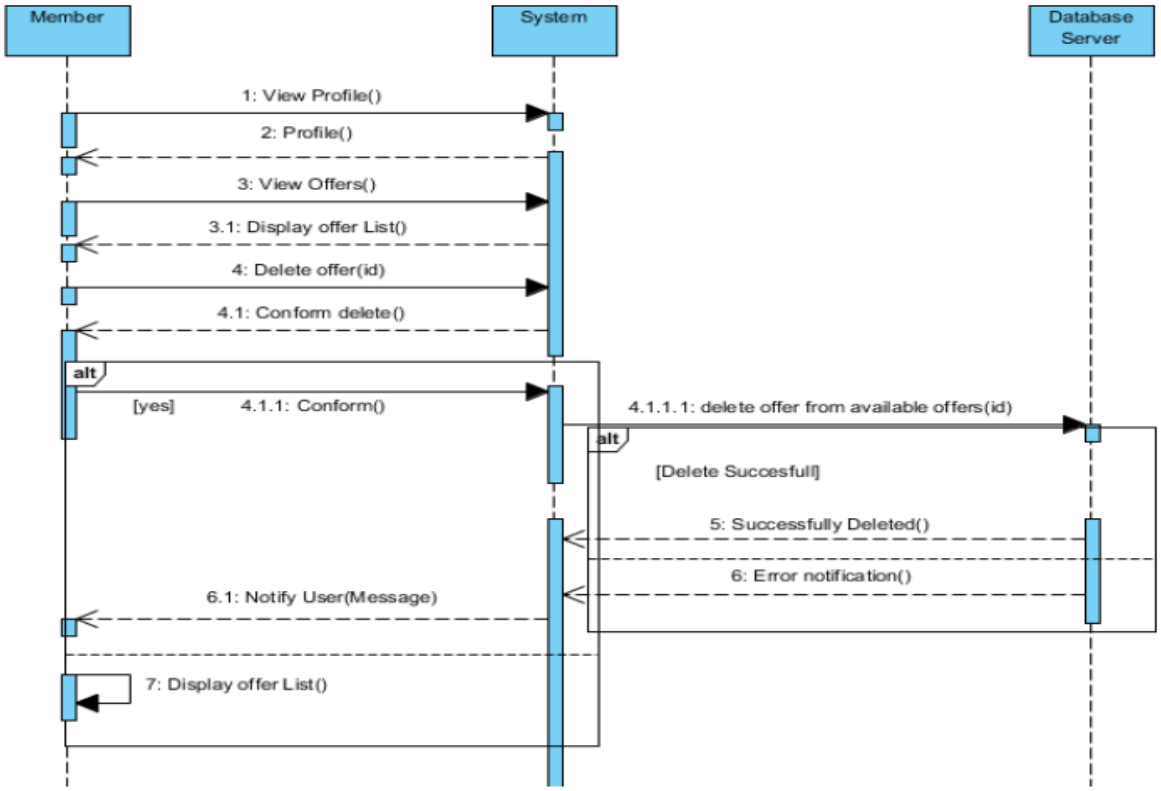

## 6.2 Login:



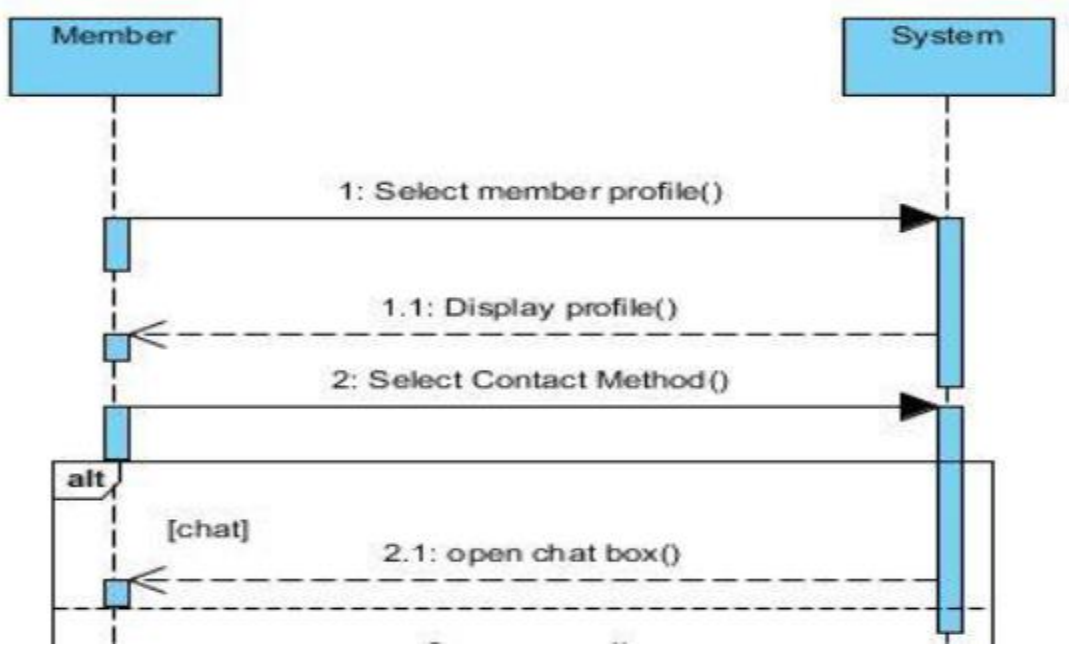
## 6.3 Search for Carrier



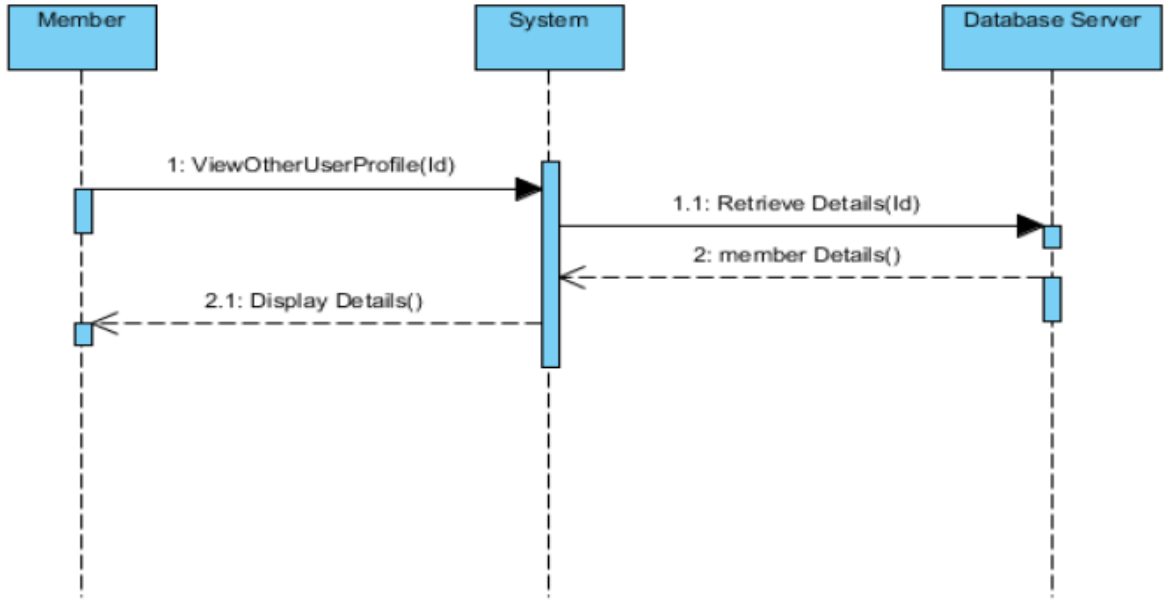

## 6.4 Delete Offer



## 6.5 Contact Other member



### 6.6 View Detail




## 7.Data Design:

### 7.1. Database design

Firebase database will be used for this project. Data will be saved in terms of objects in firebase and in form of jason tree.

#### 7.1.1. Data dictionary

Authenticate:
User must have userName or Email and password to verify from DB.

#### 7.1.2 RegistereUser:

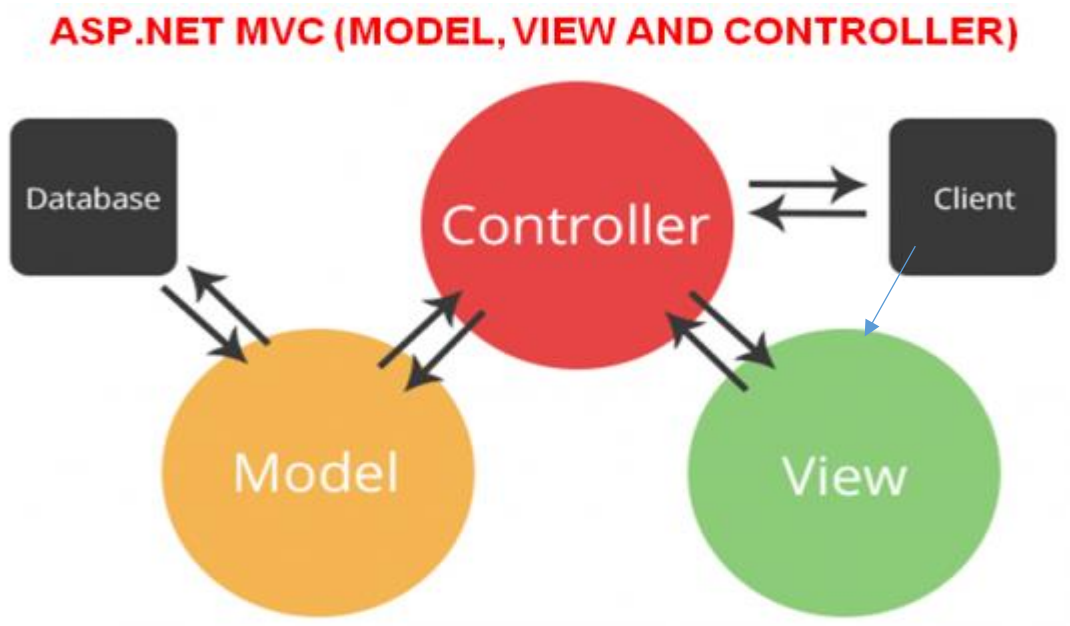
User must have id,name,contact number, image of its identity etc.

#### 7.1.3 SearchForCarrier:

User must download that app or he/she can be member and visitor of that app,they must have identity to visit.

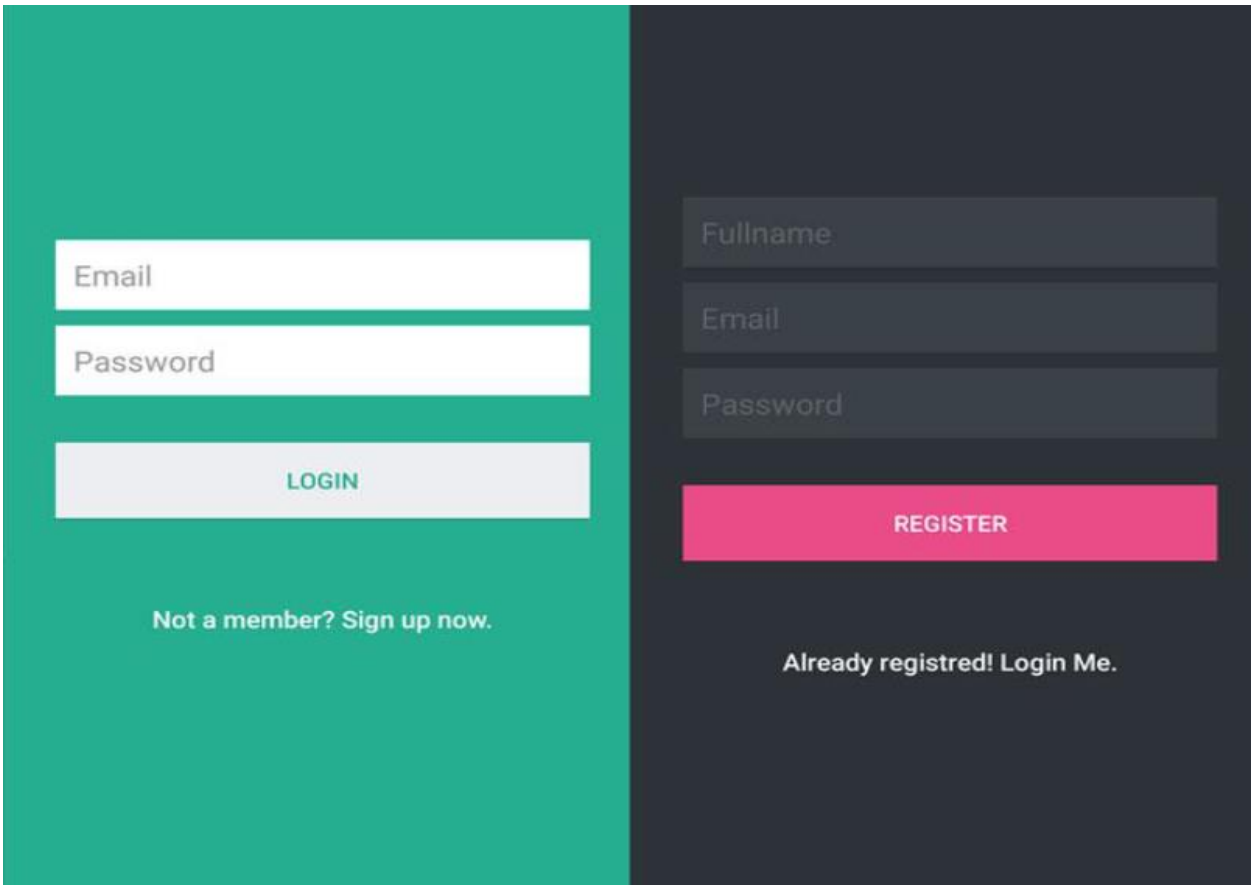
## 7.2 Computational Model

User can request to controller or direct can see the view without inolving other two modules of this arcitecture.



# 8. HUMAN INTERFACE DESIGN:

## 8.1 Login & SignUp




It's somehow under development so the first page I have done with the rest will be donw by the requirement and the time as well.
A discussion of screen objects and actions associated with those objects.

# 8. User Documentation

User manual will be provided to user along with the application.

# 9 References

Project SRS and SDS is been made and You can contact me for that help.