

# **CS5551 ADVANCED SOFTWARE ENGINEERING**

## **PROJECT REPORT, PHASE – I**

**Project Title: ROOKART**

### **Project Owners:**

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## 1.0 Introduction

RooKart is a UMKC community based e-commerce mobile application which empowers Students and Staff members bearing a valid registered UMKC Email id, to Sell or Buy Products, Offer Services, Post Classified Advertisements, Offer Deals on Demand etc.

As all the transactions and Product and Services are exchanged in between the University related community High Reliability, Easy Shipping and Quality services are guaranteed.

Once user is registered with RooKart, the user will be able to see, all the products and services currently available on the for sale Such as Electronics, Furniture etc for Sale or Painting Classes, Fitness Class, Cooking Services etc.

User as a Seller can post their Products for sale on Categorised Platforms provided by RooKart with the Complete history of the Product with images, Geo-location and Price amount etc. Similarly, User can post all the services they wish to offer with complete description, images, pricing details and duration, geo-locations etc.

This Project is divided into four Iterations, each iteration will improve the implementation features. The current iteration is Iteration -1/ Phase – I.

### 1.1 Phase – 1 includes

1. Design and Implementation of the application with the Login Page, Registration Page, Home Page.
2. UML Class Diagram, Sequence Diagram, State Diagrams, Wire Frames related to the above functionalities.

## 2.0 Functionalities:

### 2.1 Login Page

Login Page is the landing page upon opening RooKart application, Login page lets the user to login upon successful validation of user credentials. User needs to input registered email id and password. If the user does not have an account on RooKart, he should register.

### 2.2 Register Page

Register page collects the personal information of the user such as, User Name, Email ID, Password and Mobile Number and creates an account for the user.

### 2.3 Home Page

Once the user account is verified, Post Login user is redirected to this Home Page, which offers the in app services as Products and Services.

Upon selecting one the user is redirected to the Product/ Service Page.

### 3.0 Proposed System

#### 3.1 Functional Requirement Specification:

- I. User Should have a sign in.
- II. If User is new to RooKart User should Register
- III. User should be able to Provide Personal Information.
- IV. User details are need to be validated.
- V. Upon Successful login User should see the Home Page – Product and Services Page.
- VI. User be able to Logout.

### 4.0 Tools and Technologies:

- I. ANDROID STUDIO
- II. Front end: JavaScript
- III. Programing Language: Java
- IV. Creately

### 5.0 Development

#### System Design

- I. Login: Users login using their registered UMKC email address and password.
- II. Registartion: Collects the personal information of the user and creates an account.
- III. Information Collected: User Name, Email id, Password, Phone Number.
- IV. Home page: Consists two buttons, Products, Services.

### 6.0 User Interface

Login UI: Implement Login Activity UI Design

Register UI: I Implement Register Activity UI Design

Home Page UI: Implement Home Page Activity UI Design.

### 7.0 Wire Frames

#### 7.1 Login Page Wire Frame

Login page has two buttons, Login and Register. If the user is a new user to Rookart he can register using the Register button

Here is the Login Page Wire Frame.

**Sign In**

---

Email

ABCDE@mail.umkc.edu

Password

\*\*\*\*\*

☐ Remember Me

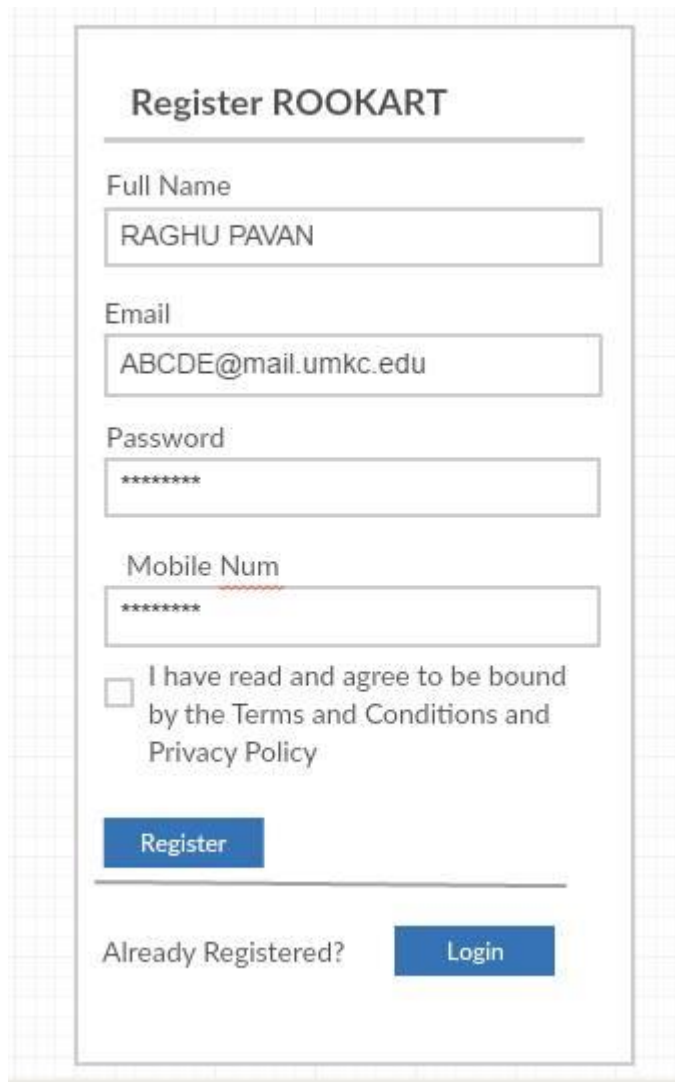
[Forgot your password?](#)

---

Don't have an account yet?

## 7.2 Registration Page

If the user is a new User he can Register on clicking Register button, Register Page collects the user's personal information such as User Full Name, Email id, Password and Phone Number.

A registration form titled "Register ROOKART" with a horizontal line below the title. It contains four input fields: "Full Name" with the value "RAGHU PAVAN", "Email" with the value "ABCDE@mail.umkc.edu", "Password" with the value "\*\*\*\*\*", and "Mobile Num" with the value "\*\*\*\*\*". Below the mobile number field is a checkbox that is currently unchecked, followed by the text "I have read and agree to be bound by the Terms and Conditions and Privacy Policy". A blue "Register" button is positioned below the checkbox. At the bottom of the form, the text "Already Registered?" is followed by a blue "Login" button.

**Register ROOKART**

---

Full Name  
RAGHU PAVAN

Email  
ABCDE@mail.umkc.edu

Password  
\*\*\*\*\*

Mobile Num  
\*\*\*\*\*

☐ I have read and agree to be bound by the Terms and Conditions and Privacy Policy

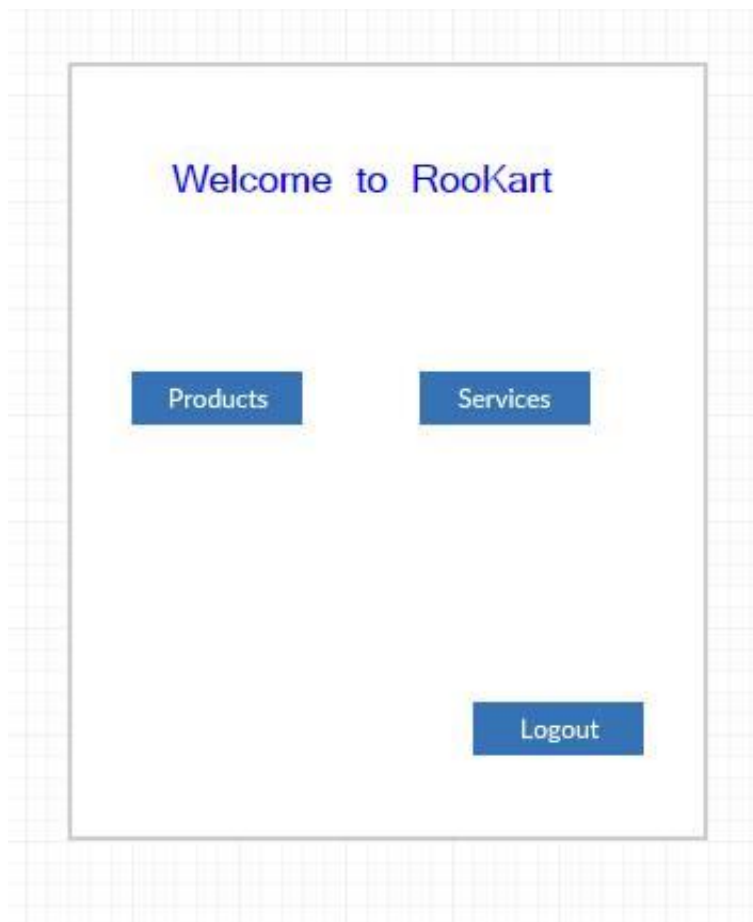
[Register](#)

---

Already Registered? [Login](#)

### 7.3 Home Page

Post the Login, the user is redirected to the Home Page. Home page consists of two buttons, Products and Services.



## 8.0 Class Diagram

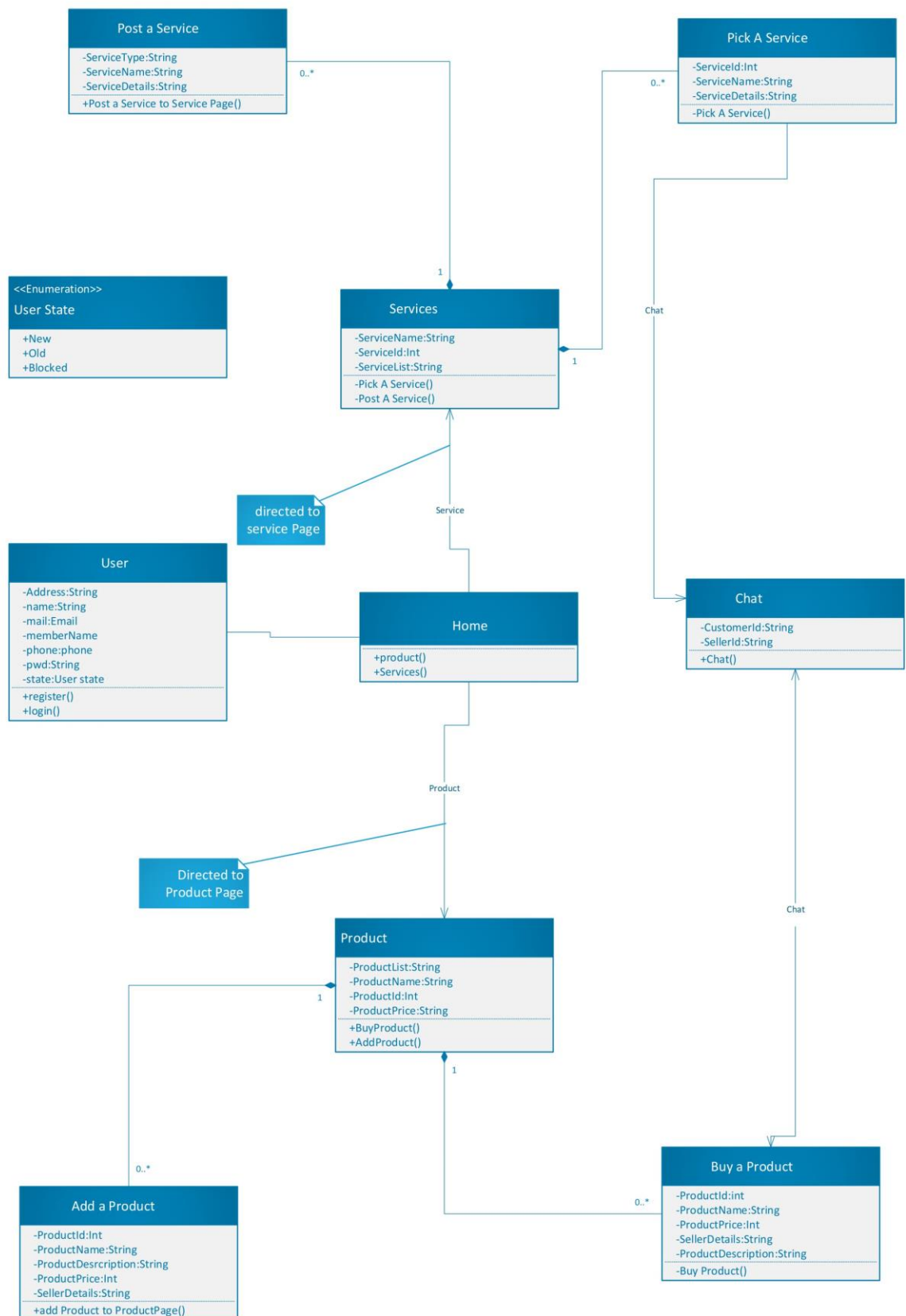
The class diagram below describes the flow of the system and process.

User Class had variables such as User Name, Email, Password, Phone number. These details are used for registration. Post registration user can login using Email and Password. Then the system validates the credentials using Authecation function and redirects the user to Home Page.

On the Home Page, two functionalities are Provided which are Products and Services. User can select one among them at a time. On click functionality is enabled for both and they redirect the user to the respective pages.

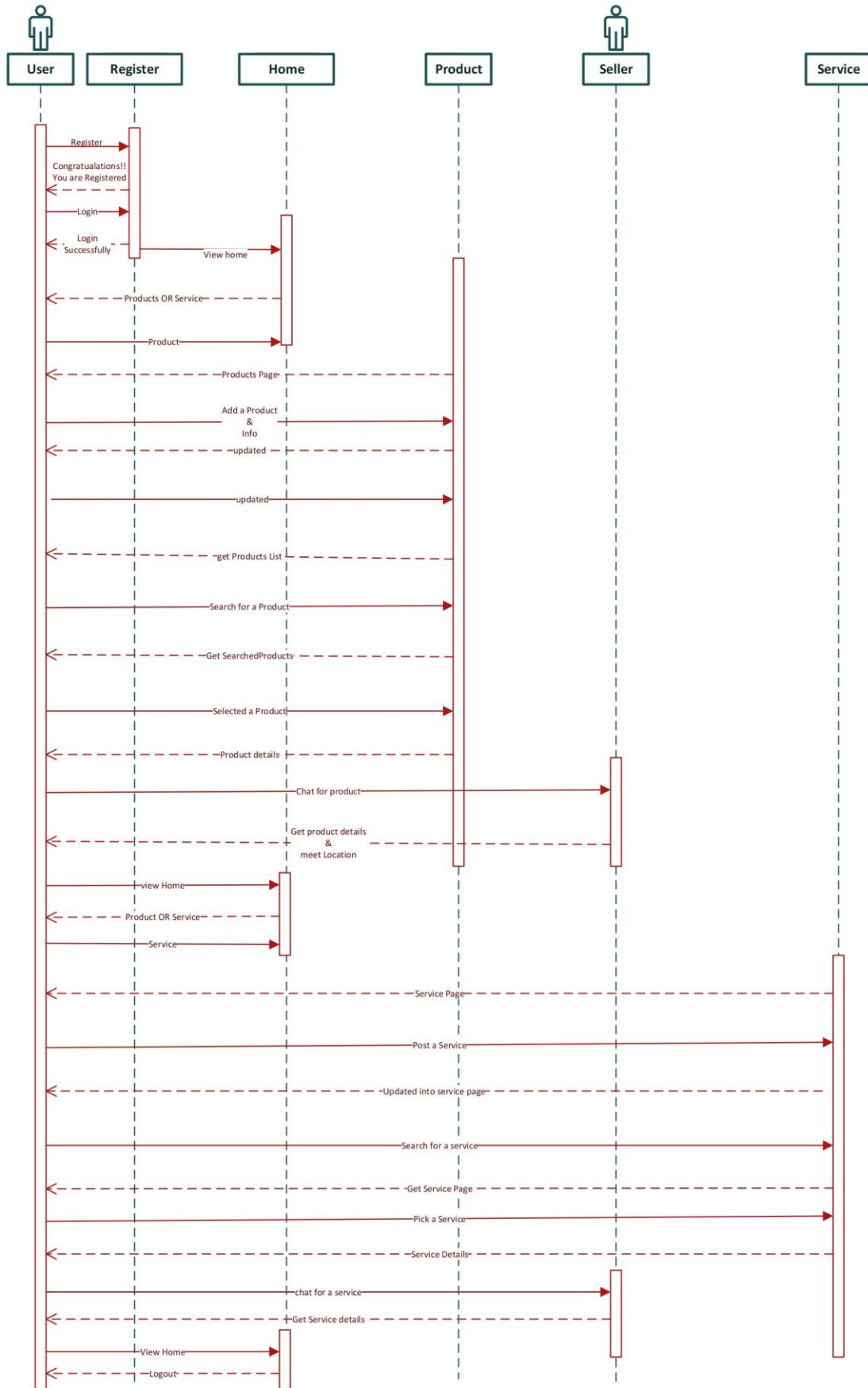
Product Page: It consists of two functionalities, Buy a Product, Sell a Product.

Service Page: Post a Service, pick a Service functionalities are provided.



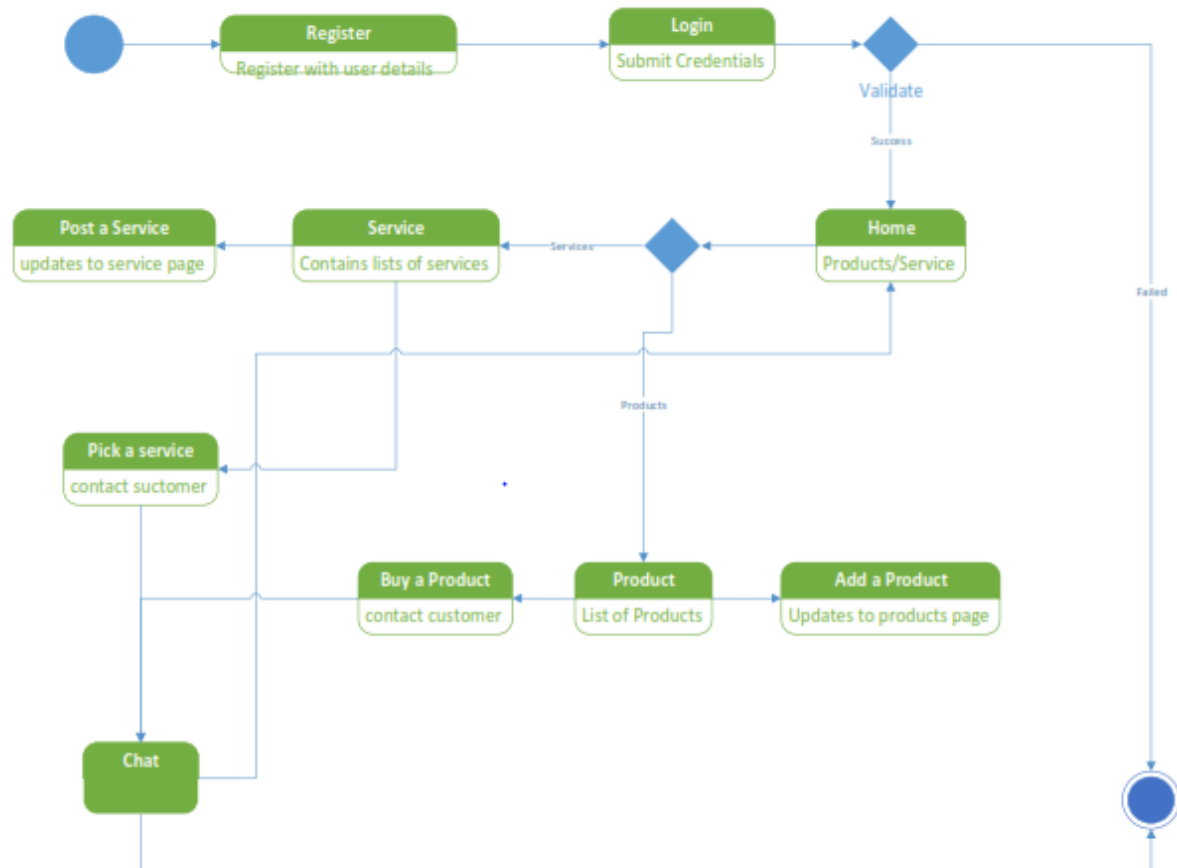
## 9. Sequence Diagram





The above sequence diagram represents the complete process of this project. As the above screenshot shows, the registration process is prior to the login, after registration is completed login function takes place. Upon Successful login the view home function follows.

## 10. State Diagram



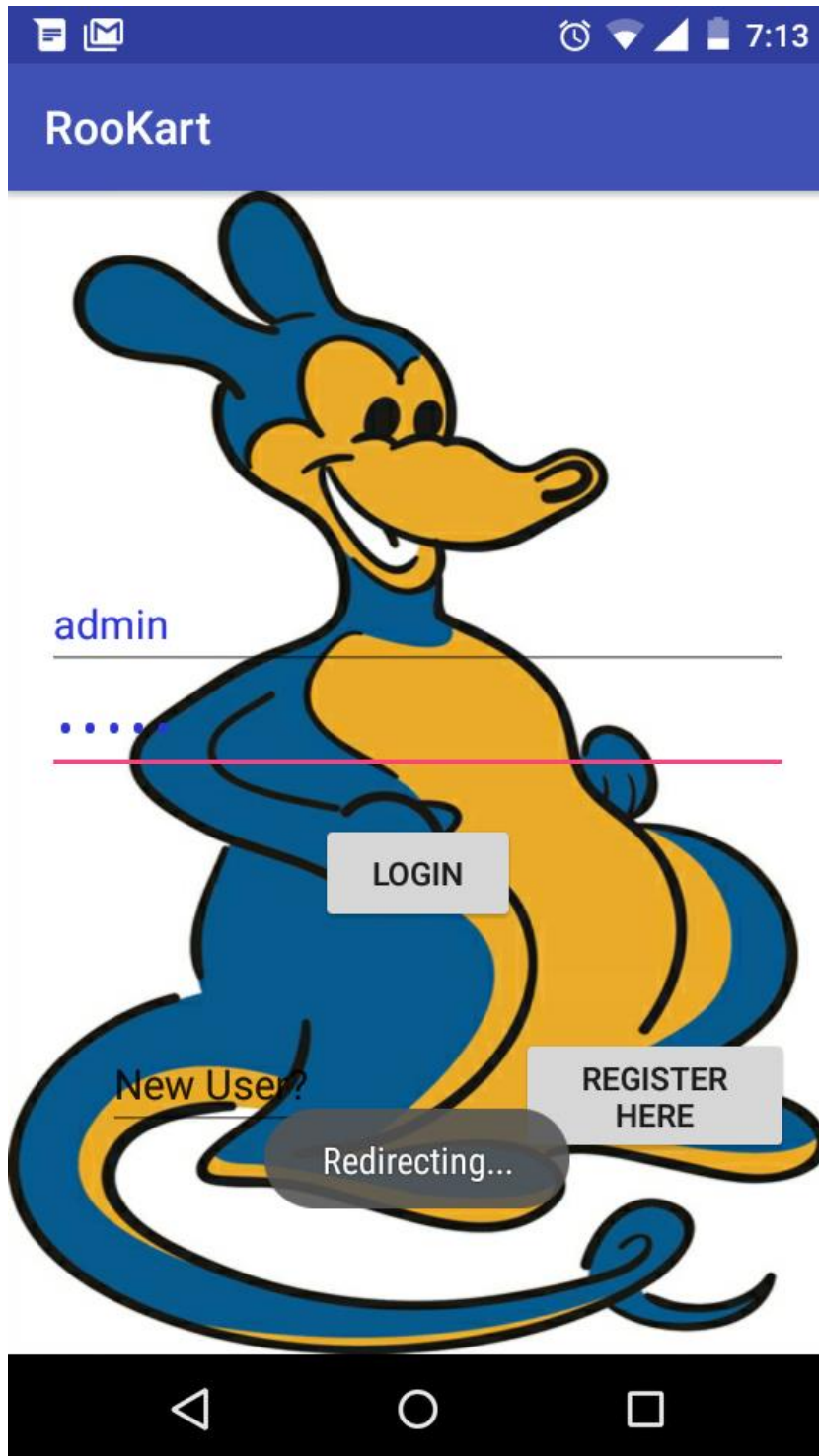
The above screen shot of the State Diagram represents the different states of the application.

Upon Successful Registration, it Navigates to the Login State, after the credentials validation by the authentication function the it redirects to the Home State, upon Selection among the Product or services, user is navigated to the respective Product or services state depending on the state chosen by the user.

## 11. Layouts

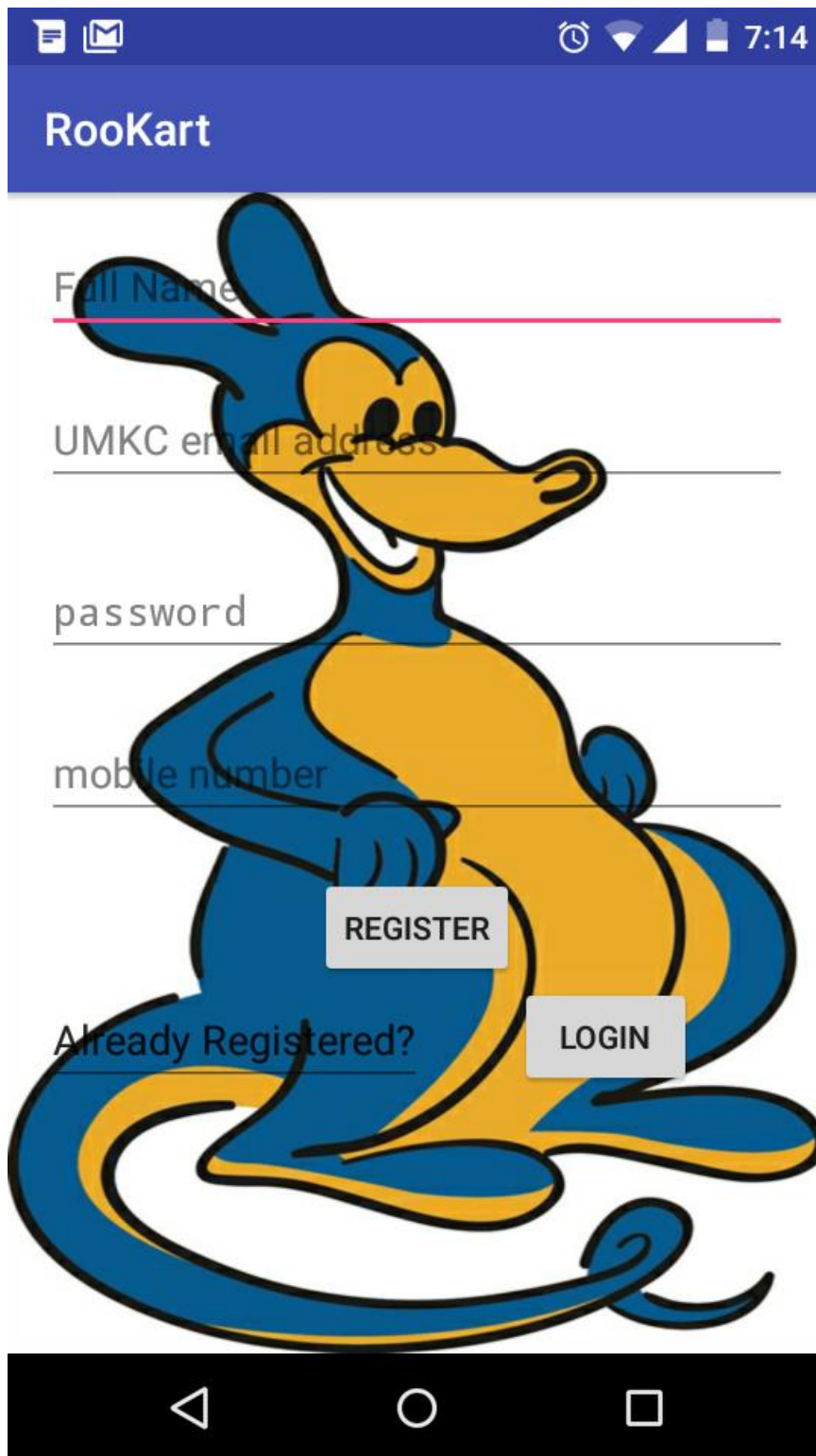
### 11.1 Login Page

The below screen shot shows the login page after credential validation of the user, with User Name and Password as “admin”.



Register Page:

Register Page ScreenShot.



A screenshot of a mobile application's registration page. The app is titled "RooKart" in a blue header bar. The background features a cartoon illustration of a blue and yellow kangaroo. The registration form includes the following elements:

- Full Name**: A text input field with a pink underline.
- UMKC email address**: A text input field with a grey underline.
- password**: A text input field with a grey underline.
- mobile number**: A text input field with a grey underline.
- REGISTER**: A grey button with white text.
- Already Registered?**: A text label with a grey underline.
- LOGIN**: A grey button with white text.

The bottom of the screen shows a black navigation bar with standard Android icons (back, home, recent apps).

Home Page:

The below Screen shot shows the Home Page of RooKart application.



## **12. Project Management**

### **RooKart Project Implementation:**

#### **Increment 1:**

- Plan the increments to create RooKart Application.
- Finalize & document revised project plan.
- Setup the required tools android studio, zenhub and Github, visio for each of the team members.
- Document the revised project plan.
- Design Wireframes & Mockups.
- Create Architecture diagram.
- Design Sequence & Class diagram.
- Develop the Login, Registration & basic home screen
- Deploy the RooKart Android app to a mobile device
- Validate the Rookart App for basic functionalities - Login, Register & Home screens.
- Create a wiki page and project report for increment 1.

#### **Increment 2:**

- Validate & authenticate the users during registration.
- Setup local databases for the application.
- Implement the functionality for the user to add products that they want to sell.
- Implement the browse functionality for buying the products using search/view options.
- Validate the product buy, sell and browse functionalities.

#### **Increment 3:**

- Implement the functionality to communicate with other users for selling the product over messages/ call through the application.
- Functionality for the user for posting classified ads and services they wish to offer along with description and pricing specifications.
- Validate the user communication functionality.
- Validate the RooKart services functionality.

#### **Increment 4:**

- Enhancements for the application using externally available API's.
- Refine the GUI for RooKart buy/sell & service functionalities.
- Deploy and validate the entire RooKart Application

## Increment Milestones:

Labels

Milestones

New milestone

4 Open 0 Closed

Sort

Increment 1

Due by September 23, 2016

Last updated 10 minutes ago

This increment/iteration includes three parts: 1) Revised Project P...(more)

92% complete

1 open

12 closed

Edit Close Delete

Increment 2

Due by October 14, 2016

Last updated 2 minutes ago

Increment 2: • Validate & authenticate the users during registration....(more)

0% complete

3 open

0 closed

Edit Close Delete

Increment 4

Due by November 2, 2016

Last updated less than a minute ago

Increment 4: • Enhancements for the application using externally av...(more)

0% complete

2 open

0 closed

Edit Close Delete

Increment 3

Due by November 4, 2016

Last updated 1 minute ago

Increment 3: • Implement the functionality to communicate with othe...(more)

0% complete

2 open

0 closed

Edit Close Delete

## Increment 1 - User Stoies:

This repository

Search

Pull requests

Issues

Gist

+ ▾

ASE-Team16 / RooKart

Watch ▾

0

Star

0

Fork

0

<> Code

Issues 13

Pull requests 0

Projects 1

Wiki

Pulse

Graphs

Settings

Filters ▾

is:issue is:open sort:created-asc

Labels

Milestones

New issue

Clear current search query, filters, and sorts

13 Open 0 Closed

Author ▾

Labels ▾

Milestones ▾

Assignee ▾

Sort ▾

Story 1.1 : Plan the increments to create RooKart Application

#1 opened 4 hours ago by Lavakumar90

Increment 1

Story 1.2 : RooKart App - Finalize the project plan

#2 opened 41 minutes ago by Lavakumar90

Increment 1

Story 1.3 : RooKart App - Document the revised project plan

#3 opened 40 minutes ago by Lavakumar90

Increment 1

Story 1.4 : RooKart App - Design Wireframes & Mockups

#4 opened 39 minutes ago by Lavakumar90

Increment 1

Story 1.5 : RooKart App - Create Architecture diagram

#5 opened 39 minutes ago by Lavakumar90

Increment 1

<input type="checkbox"/>		<b>Story 1.6 : RookKart App - Design Sequence &amp; Class diagram</b>	
		#6 opened 38 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.7 : As an user, I will be able to login to the RookKart application</b>	
		#7 opened 37 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.8 : As an user, I need to have options to register as a RookKart member</b>	
		#8 opened 36 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.9 : As an user, I should be redirected to Home screen once the login is successful</b>	
		#9 opened 36 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.10 : Deploy the RookKart Android app to a mobile device</b>	
		#10 opened 35 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.11 : Validate the RookKart App for basic functionalities - Login, Register &amp; Home screens</b>	
		#11 opened 35 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.12 : Create a wiki page for increment 1</b>	
		#12 opened 34 minutes ago by Lavakumar90  Increment 1	
<input type="checkbox"/>		<b>Story 1.13 : Create increment 1 project report</b>	
		#13 opened 34 minutes ago by Lavakumar90  Increment 1	

## Burn down Chart

ASE-Team16 / RookKart

Watch 0
 Star 0
 Fork 0

<> Code

Issues 1

Pull requests 0

Boards

Burndown

Projects 1

Wiki

▼

Increment 1

Edit Milestone
 Change Milestone ▼

This increment/iteration includes three parts: 1) Revised Project Proposal: The Project proposal should be revised and the latest document should be prepared.

2) Project plan a. Schedule for the four different increments (for each increment, do the following tasks) ☐ Stories (Issues): Scenario & Use case specification ☐ Service Design (detailed service design, unit test design) ☐ Service Implementation (implementation and testing) b. Project Timelines, Members, Task Responsibility c. Burndown Chart

3) First Increment Report Write a documentation describing the design, implementation, testing, and deployment (including the precise descriptions and screenshots).

Labels ▼

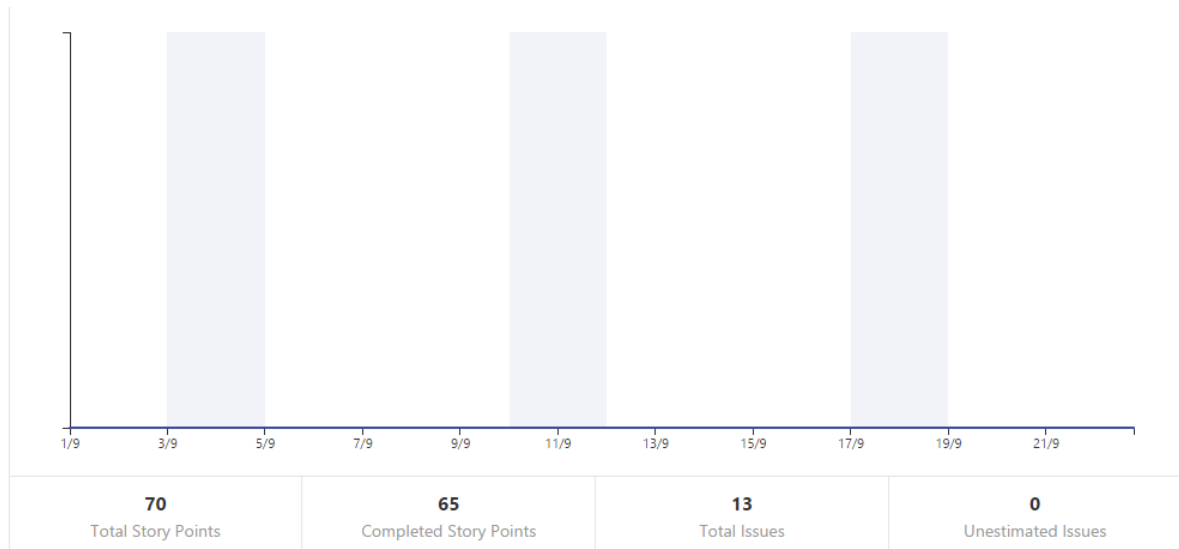
Hide Pull Requests

Burn Pipelines ▼

Start: Sep 1, 2016 [Edit](#) | Due: Sep 22, 2016 [Edit](#)

powered by | ZenHub





🚩 Increment 1		
Repository	Issues	Story Points
RooKart	🕒 #13 Story 1.13 : Create increment 1 project report	5
RooKart	🕒 #6 Story 1.6 : RooKart App - Design Sequence & Class diagram	8
RooKart	🕒 #4 Story 1.4 : RooKart App - Design Wireframes & Mockups	8
RooKart	🕒 #1 Story 1.1 : Plan the increments to create RooKart Application	8
RooKart	🕒 #11 Story 1.11 : Validate the Rookart App for basic functionalities - Login, Register & Home screens	5
RooKart	🕒 #10 Story 1.10 : Deploy the RooKart Android app to a mobile device	5
RooKart	🕒 #9 Story 1.9 : As an user, I should be redirected to Home screen once the login is successful	5
RooKart	🕒 #8 Story 1.8 : As an user, I need to have options to register as a RooKart member	5
RooKart	🕒 #7 Story 1.7 : As an user, I will be able to login to the RooKart application	5
RooKart	🕒 #3 Story 1.3 : RooKart App - Document the revised project plan	5
RooKart	🕒 #2 Story 1.2 : RooKart App - Finalize the project plan	5
RooKart	🕒 #12 Story 1.12 : Create a wiki page for increment 1	3
RooKart	🕒 #5 Story 1.5 : RooKart App - Create Architecture diagram	3

Please refer to the below link to find the same on Github.

<https://github.com/ASE-Team16/RooKart/tree/master/Increment%201/Documentation>

### 13. Bibliography

1. [www.github.com](https://www.github.com)
2. [www.developer.google.com](https://www.developer.google.com)
3. [www.developer.android.com](https://www.developer.android.com)
4. [www.umkc.edu](https://www.umkc.edu)