

eUsedItemsMart for Electronic And Antique items



By

M.FARRUKH ABBAS

Department of computer sciences

Quaid-i-Azam University

Islamabad

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In the name of Allah Who is the most Merciful and Compensate.

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DEDICATION

TO

The Imam Muhammad Baqir (A.S)

“The Founder of Science” & To

My Loving Parents, Family, My Teacher

And all my well-wishers. . .

DECLARATION

I hereby declare that this report is my own work and effort and that it has not been submitted anywhere else for any award. Where other sources of information have been used, they have been acknowledged.

M. FARRUKH ABBAS

Dated: March 19, 2019

Acknowledgment

All the praises, thanks and acknowledgments are for the creator Allah Almighty, the most Beneficent, the most Merciful, who gave me strength and enabled me to undertake and execute this task. Countless salutations upon the Holy Prophet Hazrat Muhammad (S.A.W), source of knowledge for enlightening the world with the essence of faith in Allah and guiding the mankind towards the true path of life.

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Finally, again thanks to God who has made my life more bountiful. May your name be exalted, honored, and glorified. Last but not least, I would like to thank everybody who was important to the successful completion of project.

M. Farrukh Abbas

Dated: March 19, 2019

Abstract

Selling and purchasing of antique items is a challenging task for both the customer and the shopkeeper. Before paying a physical visit, customer does not know how valuable certain item is. In addition, it is useful for the shopkeeper if only the interested customers visit his shop. “eUseditemsMart” is an android application which is helpful for customers as well as the shopkeepers as they sell their things online. In the existing system all, the activities are done manually. It is very time consuming. In our proposed system, customer can view second hand eUseditemsMart items and they can reserve item using their smartphones. All the data will be stored in the database. In this system, customers have easy access for viewing the items; reserve the items, and also have the possibility to manage customer profile.

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List of Abbreviations

UC: Use Case

SSD: System Sequence Diagram

SD: Sequence Diagram

TC: Test Case

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CHAPTER 1: INTRODUCTION

This chapter briefly describes the project, the client deliverables, the project milestones and expected document change mechanism.

1.1 PROBLEM DEFINITION

In Itwar bazar (Sunday Mart) there are some antique items which are available but customers have to pay a visit to buy the items. There is no proper platform to buy antique online through an Application or system. One of the main problems is that the customer visits the Itwar bazar but he does not get the required items that he wants to purchase and his visit to itwar bazar goes waste.

1.2 PROPOSED SOLUTION

Application of eUsed Mart provides the facility of categorizing the items from image that contains items. Shopkeeper can assign the tags and add other attributes and upload the image. Customers are not required to pay a visit to the itwaar bazar himself, instead he can book items through application. Sometimes, valuable items are destroyed or goes in waste because the shopkeeper doesn't understand the item and its worth. By providing the platform to upload these items online his potential customer base would increase.

1.3 SCOPE

It is an android based application and it is for the shopkeepers and customers. This app provides a platform to shopkeeper to upload items and set the price. Later customer can see, reserve and buy the items. This platform provides the search and view items functionality for the customer. Categorizing of items are done by system, the shopkeeper can add further description of items that he uploads, can send sms based notification for the reserved items. Customer can search items, view items, book items and rate shopkeeper. Shopkeeper can upload items, check order status and rate customer.

1.4 Constraints

- Every user must have internet connection to use this system.
 - Every user must be registered first before using this system.
 - Shopkeeper/customer must have an android phone which have minimum android OS version than 5.1 (lollipop).
-

1.5 OBJECTIVES

Objective of this system is to save the time of users (shopkeeper, customers). Users can easily interact with each other. The tasks related to selling and buying can done on single platform. One of the main objectives of this project is to facilitate the users with different services.it provides shopkeeper to upload items and advertise them, later customers can search, view, book and reserve items.

1.6 PROJECT ORGANIZATION

Project organization consists of software process model, roles and responsibilities and tools and techniques.

1.6.1 SOFTWARE PROCESS MODEL

I shall use incremental model as a software model for the completion of project due to the following reasons:

- Generates working software quickly and early during the software life cycle.
- This model is more flexible – less costly to change scope and requirements.
- It is easier to test and debug during a smaller iteration.
- Lowers initial delivery cost.
- Easier to manage risk because risky pieces are identified and handled.

1.6.2 ROLES AND RESPONSIBILITIES

This project is assigned to a single person so everything related to project will be done by me.

1.6.3 TOOLS AND TECHNIQUES

- MS Word (for report writing)
- ARGO UML (for Use Case, Domain model and Architecture diagram)
- Microsoft Visio (for System Sequence Diagram, Sequence Diagram and Class diagram)
- Android Studio (For Programming)
- Firebase Database (Cloud storage (Non-Relational Database) for project database)
- ML toolkit[2] (Firebase Machine Learning API for Labeling[3]Image)

1.7 PROJECT MANAGEMENT PLAN

This is the first task in which project developer will understand the project and will make an overall description.

1.7.1 PROJECT DESCRIPTION AND UNDERSTANDING

This is the first task in which project developer will understand the project and will make an overall description.

This task has no any sub tasks. Software project management plan is deliverable

1.7.2 SOFTWARE PROJECT MANAGEMENT PLAN

- **Description**

In this task project planning will be done.

- **Deliverable & Milestone**

- Its deliverable is Software Project Management Plan document
- There is no milestone at this level

- **Dependencies**

Its dependency is the first task which is project description. For this task, planner should have understanding of project

- **Risk and contingencies.**

There is not any risk in this task.

1.7.3 SOFTWARE REQUIREMENT SPECIFICATION

- **Description**

This task will define about the software requirement specification.

- **Deliverable & Milestone**

- Its deliverable is SRS document.
- There is a milestone after the completion of the software management plan and software requirement specification.

- **Dependencies**

Its dependency is software project management Plan.

- **Risk and contingencies.**

There is not any risk in this task.

1.7.4 SOFTWARE DESIGN DESCRIPTION

- **Description**

This task will define about the software design description.

- **Deliverable & Milestone**

- Its deliverable is SRS document.
- There is no milestone for this task.

- **Dependencies**

Its dependency is software requirement specification.

- **Risk and contingencies.**

There is not any risk in this task.

1.7.5 SOFTWARE TEST DOCUMENTATION

- **Description**

This task will define about the software test documentation.

- **Deliverable & Milestone**

- Its deliverable is whole document.
- There is a milestone for this task.

- **Dependencies**

Its dependency is software requirement specification.

- **Risk and contingencies.**

There is not any risk in this task.

		Name	Duration	Start	Finish	Predecessors	Resource Names
1		Software Project Mana...	4 days?	11/19/18 8:00 AM	11/22/18 5:00 PM		Farrukh;M5 Word
2		Project Introduction	1 day?	11/19/18 8:00 AM	11/19/18 5:00 PM		
3		Project Overview	0.5 days?	11/19/18 8:00 AM	11/19/18 1:00 PM		
4		Finding Project Deliverables	0.5 days?	11/19/18 1:00 PM	11/19/18 5:00 PM	3	
5		Project Organization	1.5 days?	11/20/18 8:00 AM	11/21/18 1:00 PM		
6		Identify Software Process Model	0.5 days?	11/20/18 8:00 AM	11/20/18 1:00 PM	4	
7		Identify Roles and Responsibilities	0.5 days?	11/20/18 1:00 PM	11/20/18 5:00 PM	6	
8		Identify Tools and Technologies	0.5 days?	11/21/18 8:00 AM	11/21/18 1:00 PM	7	
9		Project Management ...	1.5 days?	11/21/18 1:00 PM	11/22/18 5:00 PM		
10		Tasks, Deliverables an ...	0.5 days?	11/21/18 1:00 PM	11/21/18 5:00 PM	8	
11		Deliverables and Milest...	0.5 days?	11/22/18 8:00 AM	11/22/18 1:00 PM	10	
12		Meeting	0.5 days?	11/22/18 1:00 PM	11/22/18 5:00 PM	11	
13		Software Requirement ...	10 days?	11/23/18 8:00 AM	12/6/18 5:00 PM		Farrukh;M5 Word;M5 Visio
14		Requirement Collecti...	1.8 days?	11/23/18 8:00 AM	11/26/18 3:24 PM		
15		Finding functional requ...	0.7 days?	11/23/18 8:00 AM	11/23/18 2:36 PM	12	
16		Finding non-functional ...	0.7 days?	11/23/18 2:36 PM	11/26/18 11:12 AM	15	
17		Meeting & refine requir...	0.4 days?	11/26/18 11:12 AM	11/26/18 3:24 PM	16	
18		Define Usecases	2.2 days?	11/26/18 3:24 PM	11/28/18 5:00 PM		
19		Write Usecase text for...	0.5 days?	11/26/18 3:24 PM	11/27/18 10:24 AM	17	
20		Draw Usecase diagram	1 day?	11/27/18 10:24 AM	11/28/18 10:24 AM	19	
21		Review of Usecases	0.6 days?	11/28/18 10:24 AM	11/28/18 4:12 PM	20	
22		Meeting	0.1 days?	11/28/18 4:12 PM	11/28/18 5:00 PM	21	
23		Define Domain Model	2.1 days?	11/29/18 8:00 AM	12/3/18 8:48 AM		
24		Identify real world obj...	0.25 days?	11/29/18 8:00 AM	11/29/18 10:00 AM	22	
25		Identify relationships	0.25 days?	11/29/18 10:00 AM	11/29/18 1:00 PM	24	
26		Draw Domain model	1 day?	11/29/18 1:00 PM	11/30/18 1:00 PM	25	
27		Refine Domain model	0.25 days?	11/30/18 1:00 PM	11/30/18 3:00 PM	26	
28		Refinement of require...	0.25 days?	11/30/18 3:00 PM	11/30/18 5:00 PM	27	
29		Meeting	0.1 days?	12/3/18 8:00 AM	12/3/18 8:48 AM	28	
30		Draw ERD	2 days?	12/3/18 8:48 AM	12/5/18 8:48 AM		
31		Identify entities	0.25 days?	12/3/18 8:48 AM	12/3/18 10:48 AM	29	
32		Identify relationships	0.25 days?	12/3/18 10:48 AM	12/3/18 1:48 PM	31	
33		Design ERD	1 day?	12/3/18 1:48 PM	12/4/18 1:48 PM	32	
34		Review ERD & Meeting	0.5 days?	12/4/18 1:48 PM	12/5/18 8:48 AM	33	
35		Develop SRS	1.9 days?	12/5/18 8:48 AM	12/6/18 5:00 PM		
36		Write SRS Document u...	1.1 days?	12/5/18 8:48 AM	12/6/18 9:36 AM	34	
37		Review SRS and make ...	0.5 days?	12/6/18 9:36 AM	12/6/18 2:36 PM	36	
38		Document Deliverables...	0.2 days?	12/6/18 2:36 PM	12/6/18 4:12 PM	37	

Figure 1.1 Software Project management Plan

ID	Name	Duration	Start	Finish	Predecessors	Resource Names
39	Meeting	0.1 days?	12/6/18 4:12 PM	12/6/18 5:00 PM	38	
40	Software Design Desori...	9 days?	12/7/18 8:00 AM	12/19/18 5:00 PM		Farrukh;MS Word;MS Visio
41	System Architecture ...	2 days?	12/7/18 8:00 AM	12/10/18 5:00 PM		
42	Choose appropriate pa...	0.5 days?	12/7/18 8:00 AM	12/7/18 1:00 PM	39	
43	Specify strucutre of th...	0.5 days?	12/7/18 1:00 PM	12/7/18 6:00 PM	42	
44	Define communication...	0.5 days?	12/10/18 8:00 AM	12/10/18 1:00 PM	43	
45	Review & finalize . Me.	0.5 days?	12/10/18 1:00 PM	12/10/18 5:00 PM	44	
46	Database Design	2 days?	12/11/18 8:00 AM	12/12/18 5:00 PM		
47	Define database archit...	0.5 days?	12/11/18 8:00 AM	12/11/18 1:00 PM	45	
48	Normalize ERD	1 day?	12/11/18 1:00 PM	12/12/18 1:00 PM	47	
49	Meeting	0.5 days?	12/12/18 1:00 PM	12/12/18 5:00 PM	48	
50	User Interface Design	2 days?	12/13/18 8:00 AM	12/14/18 5:00 PM		
51	Design front-end	1 day?	12/13/18 8:00 AM	12/13/18 5:00 PM	49	
52	Review of front-end	0.4 days?	12/14/18 8:00 AM	12/14/18 11:12 AM	51	
53	Front-end finalized	0.4 days?	12/14/18 11:12 AM	12/14/18 3:24 PM	52	
54	Meeting	0.2 days?	12/14/18 3:24 PM	12/14/18 5:00 PM	53	
55	Detailed Design	3 days?	12/17/18 8:00 AM	12/19/18 5:00 PM		
56	Draw System Sequenc...	0.7 days?	12/17/18 8:00 AM	12/17/18 2:36 PM	54	
57	Review SSD	0.3 days?	12/17/18 2:36 PM	12/17/18 5:00 PM	56	
58	Draw Class Diagram	0.7 days?	12/18/18 8:00 AM	12/18/18 2:36 PM	57	
59	Review Class Diagram	0.3 days?	12/18/18 2:36 PM	12/18/18 5:00 PM	58	
60	Review overall design...	0.8 days?	12/19/18 8:00 AM	12/19/18 3:24 PM	59	
61	Meeting	0.2 days?	12/19/18 3:24 PM	12/19/18 5:00 PM	60	
62	Implementation	17 days?	12/20/18 8:00 AM	1/11/19 5:00 PM		Farrukh;Notepad++;Xa...
63	Coding	9 days?	12/20/18 8:00 AM	1/1/19 5:00 PM		
64	Coding form-end design	2 days?	12/20/18 8:00 AM	12/21/18 5:00 PM	61	
65	Coding whole detail de...	4 days?	12/24/18 8:00 AM	12/27/18 5:00 PM	64	
66	Review coding	2 days?	12/28/18 8:00 AM	12/31/18 5:00 PM	65	
67	Meeting	1 day?	1/1/19 8:00 AM	1/1/19 5:00 PM	66	
68	Testing	8 days?	1/2/19 8:00 AM	1/11/19 5:00 PM		
69	Verification	2 days?	1/2/19 8:00 AM	1/3/19 5:00 PM	67	
70	Validation	1 day?	1/4/19 8:00 AM	1/4/19 5:00 PM	69	
71	Tested Software	4 days?	1/7/19 8:00 AM	1/10/19 5:00 PM	70	

CHAPTER 2: REQUIREMENTS GATHERING AND ANALYSIS

This chapter contains the functional requirements of the system. It describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead, it provides a background for those requirements and the following analysis phase provides the base understanding of the project.

2.1 SYSTEM INTERFACES

This should list each system interface and identify the functionality of the software to accomplish the system requirement and the interface description to match the system..

2.1.1 USER INTERFACES

User interfaces or screens are prepared in such a way that it will provide maximum functionality in the minimum clicks. User interfaces are provided by the mobile screen. eUsed mart has very easy and user friendly interface. A single session of demo of application is enough for shopkeeper. eUsed Mart should be designed for easy to use and appropriate error messages will be prepared for end user inputs. The color scheme will be selected in such a way that readability effect increases and user will not face any difficulty in reading.

2.1.2 HARDWARE INTERFACES

Smart Mobile phone

2.1.3 SOFTWARE INTERFACES

- Android Studio with minimum OS version 5.1(lollipop)
- Firebase database

2.2 PRODUCT FUNCTIONS

2.2.1 LIST OF USE CASE

General Use cases

- Registering
- Login
- Logout

Use cases for Shopkeeper

- Upload image
- Add description
- Check order status
- Rate Customer

Use cases for Registered customer

- View items
- Reserved items
- Rate

Use cases for Non Registered user

- View items

2.3.2 USE CASES

USE CASE DIAGRAM

Use case diagram is a graphical representation of a user's interaction with the system .A use case diagram depicts the actors, use cases and the relationship among them. For our system use case diagram is given in Fig. 2.1.

USE CASE DESCRIPTION

Use case details include description, primary actor, stake holders, pre-condition, post-condition, success scenario and extensions

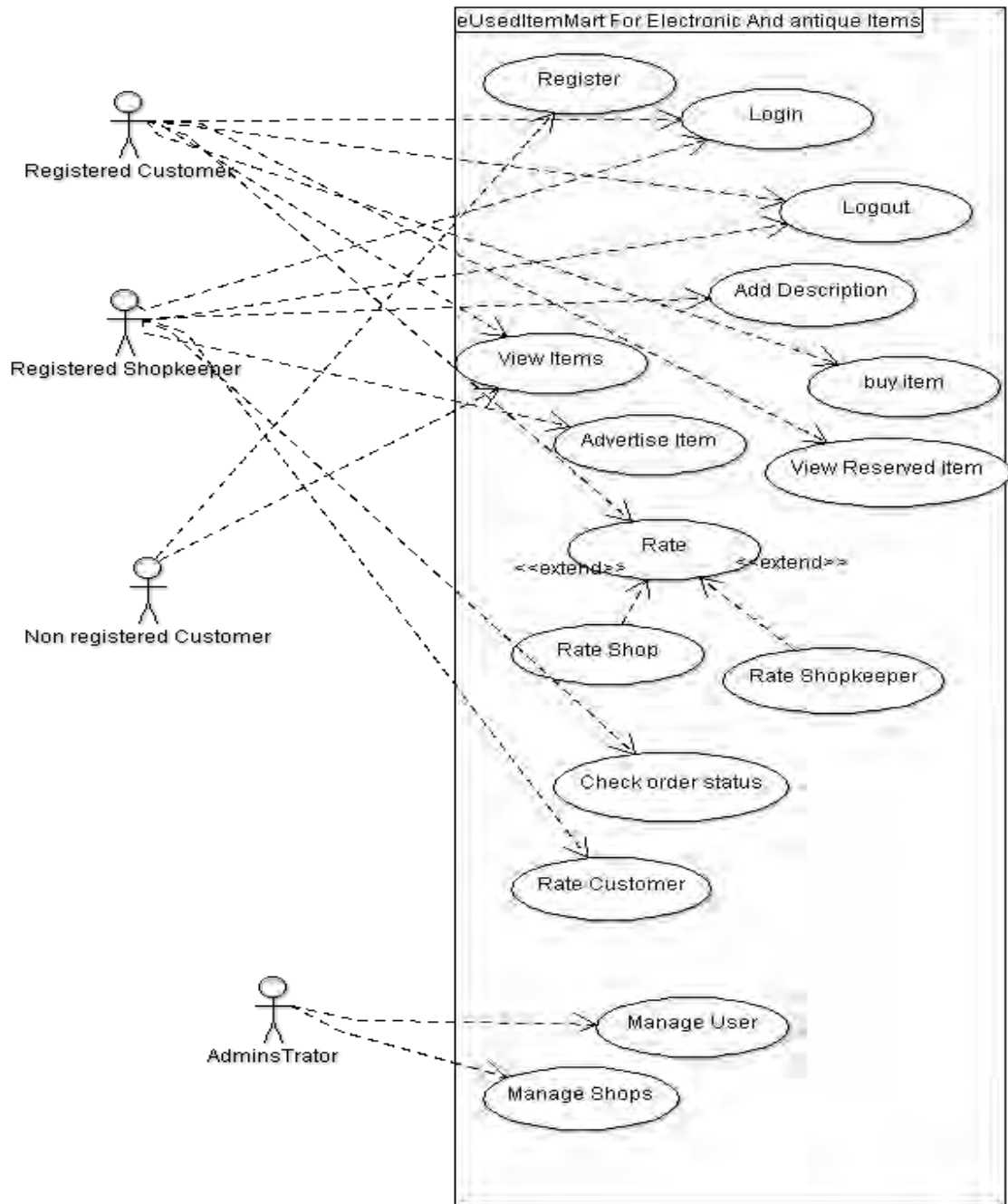


Figure 2.1 Use case Diagram

2.3 USE CASE DETAILS

2.3.1 UC-1 REGISTER ^[1]

Table 2.1 UC-1: Register

UC-1	Register
Primary actor	User (Shopkeeper, customer)
Pre-condition	User must be connected to the internet
Post-condition	User Successfully register to the system Database Updated Successfully
Main Success Scenario	1) Enter the username. 2) Enter the password. 3) Enter Email Address 4) Enter phone number 5) Select type. 6) Click Register button
Alternative Scenario	1a) User enters wrong username. 1b) System prompts user to enter correct username. 2a) User enters wrong password. 2b) System prompts user to enter correct password. 3a) User enters wrong email address 3b) System prompts user to enter correct email address 4a) User enters wrong phone number 4b) System prompts user to enter correct phone number 5a) User selects the wrong type. 5b) System prompt user to select correct type. 6a) User submits information without filling all required fields. 6b) System prompts user to fill all required fields.
Special Requirements	None
Technology	1. Internet Connection 2. Android Phone

1. See Fig 4.1 registration Screen User Interface

2.3.2 UC-2: LOGIN *

Table 2.2 UC-2: Login

UC-2:	Login
Primary actor	User (Shopkeeper, customer)
Pre-condition	User must be registered.
Post-condition	User will login successfully.
Main Success Scenario	<ol style="list-style-type: none"> 1) Enter the username. 2) Enter the password. 3) Select type. 4) Click login button
Alternative Scenario	<ol style="list-style-type: none"> 1a) User enters wrong username. 1b) System prompts user to enter correct username. 2a) User enters wrong password. 2b) System prompts user to enter correct password. 3a) User selects the wrong type. 3b) System prompt user to select correct type. 4a) User submits information without filling all required fields. 4b) System prompts user to fill all required fields.
Special Requirements	None.
Technology	<ol style="list-style-type: none"> 1. Internet Connection 2. Android Phone
Frequency	Less frequent (after 2-3 Days)

*. See Fig 4.2 Login User Interface

2.3.3 UC-3: LOGOUT

Table 2.3 UC-3: Logout

UC-3	Logout
Primary actor	User (Shopkeeper, customer)
Pre-condition	User must be logged in.
Post-condition	User has been logged out successfully.
Main Success Scenario	1) User presses “Logout” button. 2) System logs the user out and invalidates the session.
Alternative Scenario	1a) Server is down/no internet connection.
Special Requirements	None.
Technology	.1. Internet connection 2. Android Phone
Frequency	Less frequent (after 2-3 Days)

2.3.4 UC-4 ADVERTISE ITEM*

Table 2.4 UC-4: Advertise Item

UC-4	Advertise Item
Primary Actor	User (Shopkeeper)
Pre-condition	User must be log in as a shopkeeper and must be connected to the internet
Post-condition	Image upload successfully
Main success Scenario	<ol style="list-style-type: none">1) Select upload image2) Select image from gallery3) Select image from camera4) Select the upload button
Alternative Scenario	<ol style="list-style-type: none">2a) image doesn't exist in the gallery2b) system suggest to choose other image3a) camera didn't open3b)system suggest to reopen the camera4a) image didn't upload4b) system suggest to check your internet connection
System Requirement	None
Technology	<ol style="list-style-type: none">1) Internet connection2) Android phone
Frequency	Few times a week

*. See Fig 4.3 Advertise Item User Interface

2.3.5 UC-5 VIEW ITEMS*

Table 2.5 UC-5:View items

UC-6	View Item
Primary Actor	User (Registered Customer ,non Registered Customer)
Pre-condition	User must have connected to the internet
Post-condition	User view the items
Main Success Scenario	<ol style="list-style-type: none"> 1) User select the category of the item 2) User view the item
Alternative Scenario	<ol style="list-style-type: none"> 1a) user category didn't exist 1b) system suggest user to select from the category to view item 2a) items didn't load for the view 2b) system suggest user to check your internet connection
System Requirements	None
Technology	<ol style="list-style-type: none"> 1) Internet connection 2) Android phone
Frequency	More Then one time In a Days

*. See Fig 4.5 View Item User Interface

2.3.6 UC-6 RESERVE ITEMS*

Table 2.6 UC-6 Reserve items

UC-7	Reserve item
Primary Actor	User(Register Customer)
Pre-condition	User must be login in the system and must be connected to the internet
Post-condition	User reserved the items successfully
Main success scenario	1) User select the item 2) User reserved the item successfully
Alternative scenario	1a) item is not available 1b) system show that item is no longer available
System Requirements	None
Technology	1) Internet connections 2) Android phone
Frequency	Few times a week

*. See Fig 4.4 Reserved Item User Interface

2.3.7 UC-7 BUY ITEM

Table 2.7 UC-7: Buy item

UC-8	Buy item
Primary Actor	User(Register Customer)
Pre-condition	User must be login in the system and must be connected to the internet
Post-condition	User buy the items successfully
Main success scenario	1) User select the item 2) User buy the item successfully
Alternative scenario	1a) item is not available 1b) system show that item is no longer available 2a) no internet connection 2b) system suggest to check the internet connection 3a) user have no money in account 3b) system suggest to check the account
System Requirements	None
Technology	3) Internet connections 4) Android phone
Frequency	Few times a week

2.3.8 UC-8 VIEW RESERVED ITEMS

Table 2.8 UC-8: View Reserved items

UC-8	View Reserved items
Primary Actor	User(shopkeeper, Register Customer)
Pre-condition	Some items are already reserved
Post-condition	List of the Reserved Items.
Main success scenario	1) User view the reserved item
Alternative scenario	1a) item is not available 1b) system show that item is no longer available
System Requirements	None
Technology	3) Internet connections 4) Android phone
Frequency	Few times a week

2.3.9 UC-9 RATE SHOP/SHOPKEEPER

Table 2.9 UC-9: Rate shop/shopkeeper

UC-9	Rate shop/shopkeeper
Primary Actor	User(Register Customer)
Pre-condition	User must be login in the system and connected to the internet
Post-condition	User rate the shopkeeper and the shop
Main success scenario	<ol style="list-style-type: none">1) User select the shop2) User rate the shop correct successfully3) User buy item from shopkeeper before
Alternative scenario	<ol style="list-style-type: none">1a) user didn't select the shop1b) system suggest you must select the shop to login
System Requirements	None
Technology	<ol style="list-style-type: none">1) Internet connections2) Android phone
Frequency	Less frequent

2.3.10 UC-10 ADD DESCRIPTION

Table 2.10 UC-10: Add Description

UC-10	Add Description
Primary Actor	User(Shopkeeper)
Pre-condition	Shopkeeper must be login in the system and connected to the internet Item is selected and shopkeeper ready for adding description.
Post-condition	Description is added updated in the DB.
Main success scenario	1) Shopkeeper click add description button 2) Shopkeeper Add description successfully
Alternative scenario	1a) Shopkeeper add wrong description to item 1b) system show no items are founded
System Requirements	None
Technology	5) Internet connections 6) Android phone
Frequency	Many times in a week

2.3.11 UC-11 CHECK ORDER STATUS

Table 2.11 UC-11 :Check Order status

UC-11	Check Order Status
Primary Actor	User(Shopkeeper)
Pre-condition	User must be login in the system and connected to the internet
Post-condition	User checked the status
Main success scenario	3) User select the notification button 4) User view the order status
Alternative scenario	1a) user didn't get any notification 1b) system show your order status is empty
System Requirements	None
Technology	7) Internet connections 8) Android phone
Frequency	Few times a week

2.3.12 UC-12 MANAGE SHOPS

Table 2.12 UC-12: Manage Shops

UC-12	Manage Shops
Primary Actor	User(Admin)
Pre-condition	User must be login in the system and connected to the internet
Post-condition	User added shop
Main success scenario	5) User select the notification button 6) User view the registration request
Alternative scenario	1a) user didn't get any notification 1b) system show your registration request list is empty
System Requirements	None
Technology	9) Internet connections 10) Android phone
Frequency	Few times a week

2.4 SOFTWARE SYSTEM ATTRIBUTES

2.4.1 RELIABILITY

The system shall never crash, other than error cause by failure of the operating system. If there will any error, then application will display an appropriate message such that user will not feel any ambiguity while using this application.

2.4.2 AVAILABILITY

It requires the following conditions:

- Internet connection

Internet connection is required to update the database, if in case user(shopkeeper) may want to upload some items or check order status. If the customer wants to book or reserve item, internet connection is required to update the firebase database.

2.4.3 SECURITY

- Secure database will be used which will require password before connection.
- Password sent to the database for registration or login purposes will be in encrypted form.
- User should be logged in before performing any tasks.

2.4.4 MAINTAINABILITY

If there will any fault then it will be easy to correct fault and modify the code, because source code will be written in Object Oriented way. Code will be well commented such that it will help software developer to understand the code easily that will enable him to make changes or upgrade.

2.4.5 PORTABILITY

The eUsed mart is the android based application so it ensures the portability. It will require an android phone to run application. Smart phone with minimum version up to 5.1 (lollipop).

2.4.6 Performance

As eUsed mart is android based application so its performance could be affected by the internet speed and also by the specification of the application device. If the user has a internet connection then it will display results of query from user sides quickly. Usually results will show 2 to 3 seconds.

2.5 SYSTEM SEQUENCE DIAGRAM

A system sequence diagram illustrates input and output events related to our system. System is treated as black box and the emphasis of the diagram is events that are generated by the system for a particular scenario or use-cases.

I have given some of the system sequence diagrams which we need the most.

2.5.1 SSD-1: REGISTER

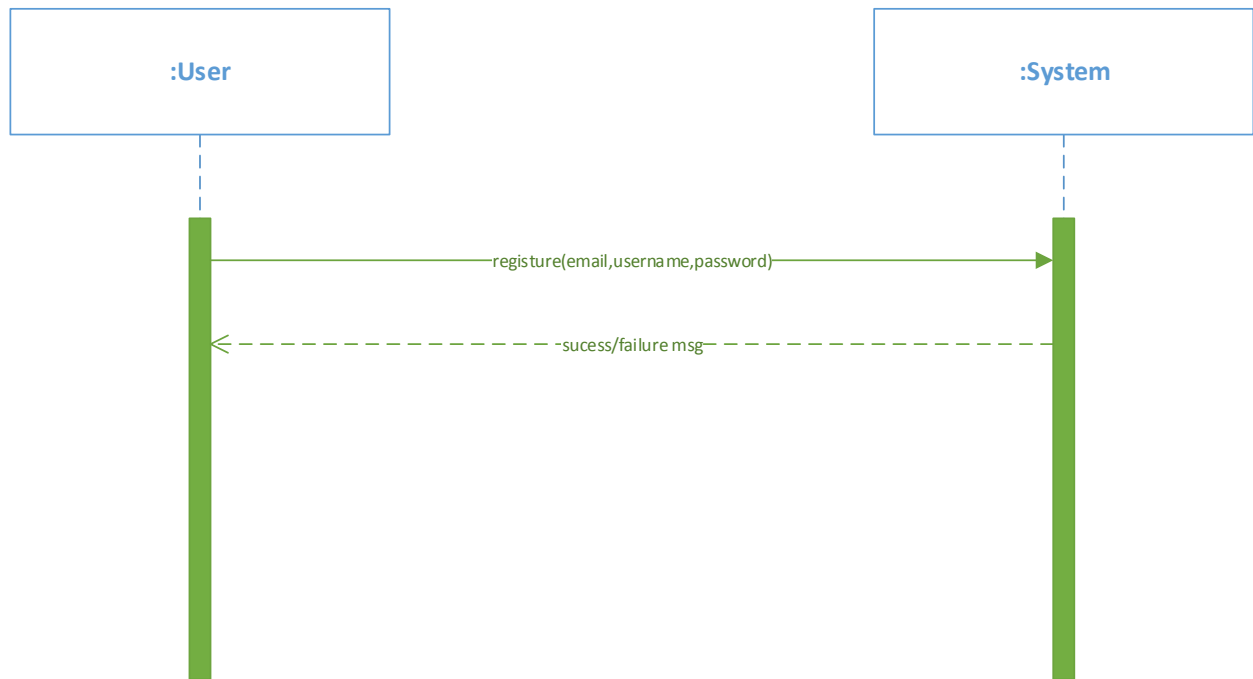


Figure 2. 3 SSD-1: Register

2.5.2 SSD-2: LOGIN

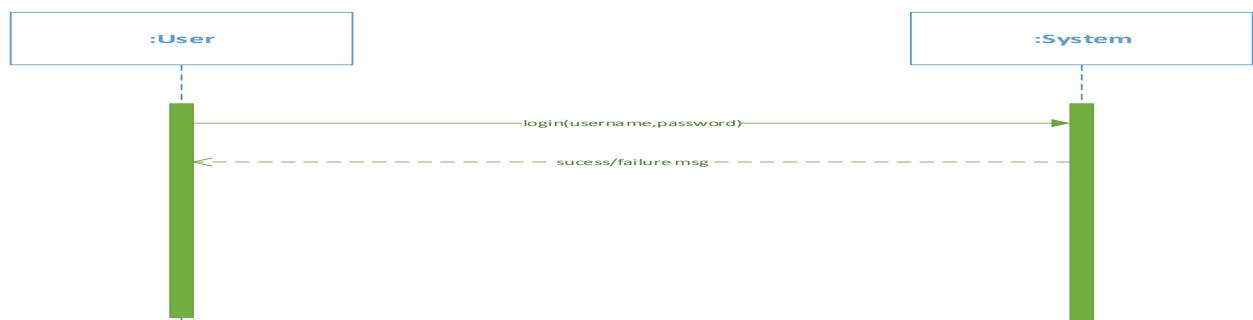


Figure 2. 2 SSD-2: Login

2.5.3 SSD-3: RESERVE ITEM



Figure 2. 4 SSD-3: Reserve item

2.5.4 SSD-4 VIEW ITEM

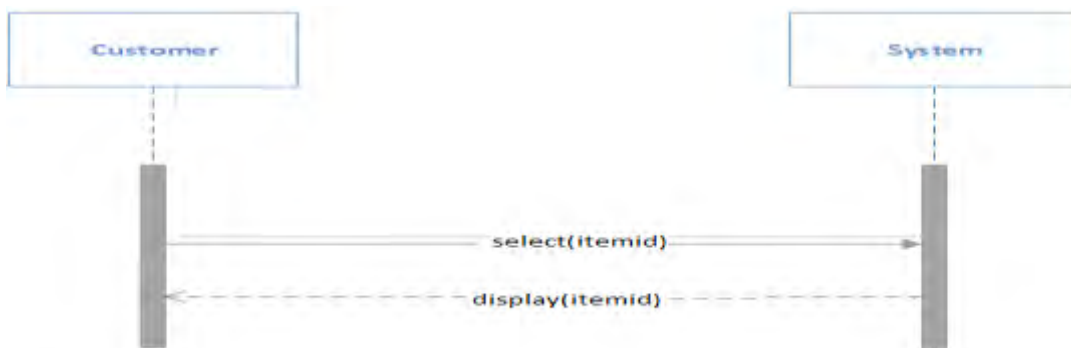


Figure 2. 5 SSD-4: View item

2.5.5 SSD-5 ADVERTISE ITEM



Figure 2. 6 SSD-5: Advertise item

2.5.6 SSD-6 SEARCH ITEM



Figure 2. 7 SSD-6: Search item

2.5.7 SSD-7 CHECK ORDER STATUS



Figure 2.8 SSD-7: Check Order Status

2.5.8 SSD-8 RATE SHOPKEEPER



Figure 2.9 SSD-8 Rate Shopkeeper

2.5.9 SSD-9 RATE CUSTOMER

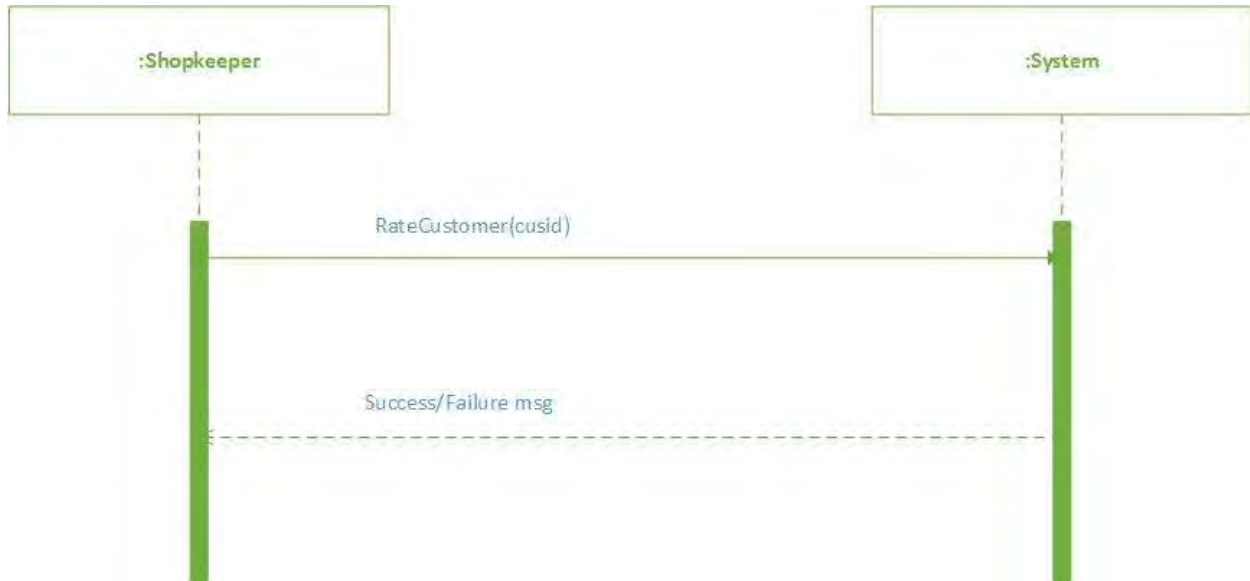


Figure 2.10 SSD-9 Rate Customer

2.6 DOMAIN MODEL

Domain model is an object model of problem domain. It is based on real world classes/concepts and their relationships, that is used to identify the relationships among all the entities within the scope of problem domain

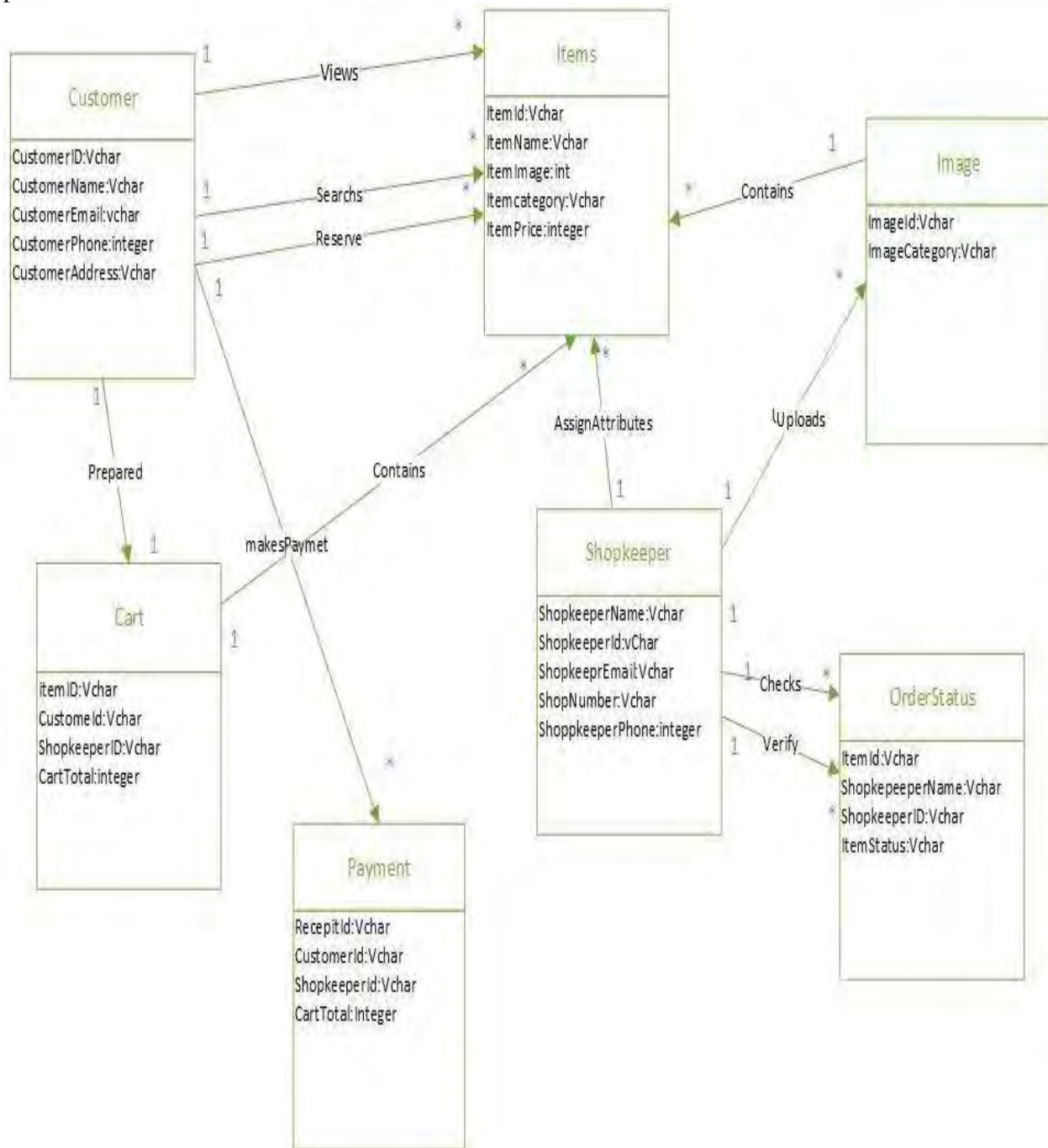


Figure 2.11 Domain Model

2.7 LIST OF ITEMS BELONGS TO ELECTRICAL HARDWARE AND ANTIQUE CATEGORIES

Following list of item belong to Electrical Hardware Categories

- 1) Computer
- 2) Solar panel
- 3) Speakers
- 4) Telephones
- 5) Tapes
- 6) Dishwasher
- 7) Washing Machine
- 8) Dvd Player
- 9) Tools sets
- 10) Pipes

Following is list of items belong to antique and Home Appliances

- 1) Sculpture
- 2) Musical Instruments
- 3) Customized knife
- 4) Fountains
- 5) Furniture
- 6) Paintings
- 7) Fanous
- 8) Watches

CHAPTER 3 SOFTWARE DESIGN DESCRIPTION

This chapter provides software design document of eUsedmart in detail and tracks the necessary information require to effectively define the architecture and system design Product Overview. This document will help the developer to understand the inner workings of the eUsedmart.

3.1 DESIGN OVERVIEW

The software design document provides design details of eUsedmart. It includes the following diagrams which will explain the design overview of the system.

- Class Diagram
- Sequence Diagrams
- Architecture of system

3.2 CLASS DIAGRAM

A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.



Figure3.1:Class Diagram

3.3 SEQUENCE DIAGRAMS

A sequence diagram is an interaction diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence.

3.3.1 REGISTRATION



Figure 3. 2 SD for Registration

3.3.2 SD LOGIN

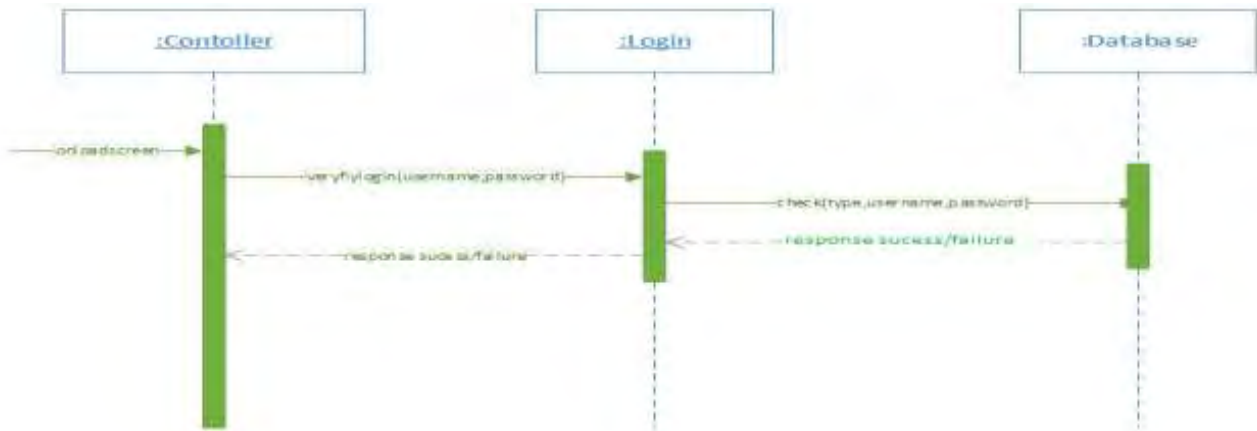


Figure 3. 3 SD for Login

3. 4. 3 SD. RESERVE ITEM

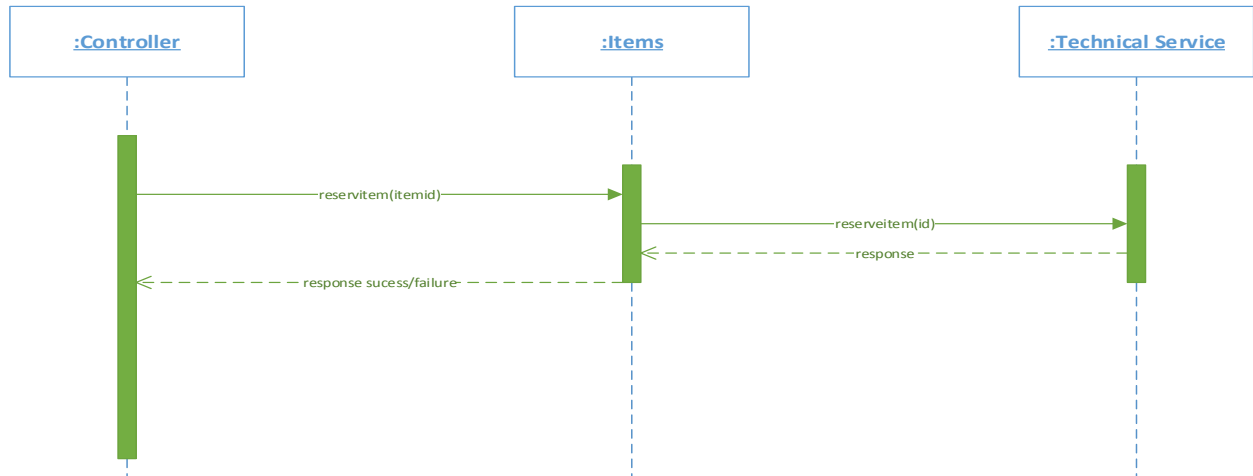


Figure 3. 4 SD for Reserved item

3. 4. 4 SDUPDATE PROFILE



Figure 3. 5 SD for Update Profile

3. 4. 5 SD. UPLADI TEMS

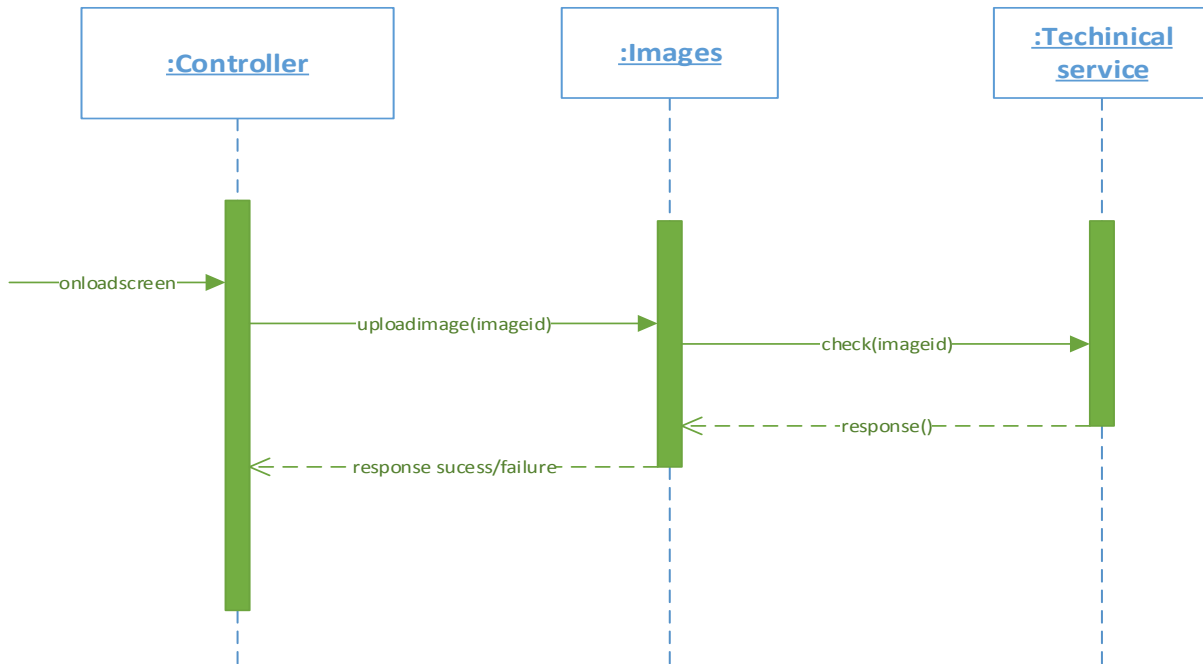


Figure 3. 6 SD for upload image

3. 4. 6 SD. RATE SHOP

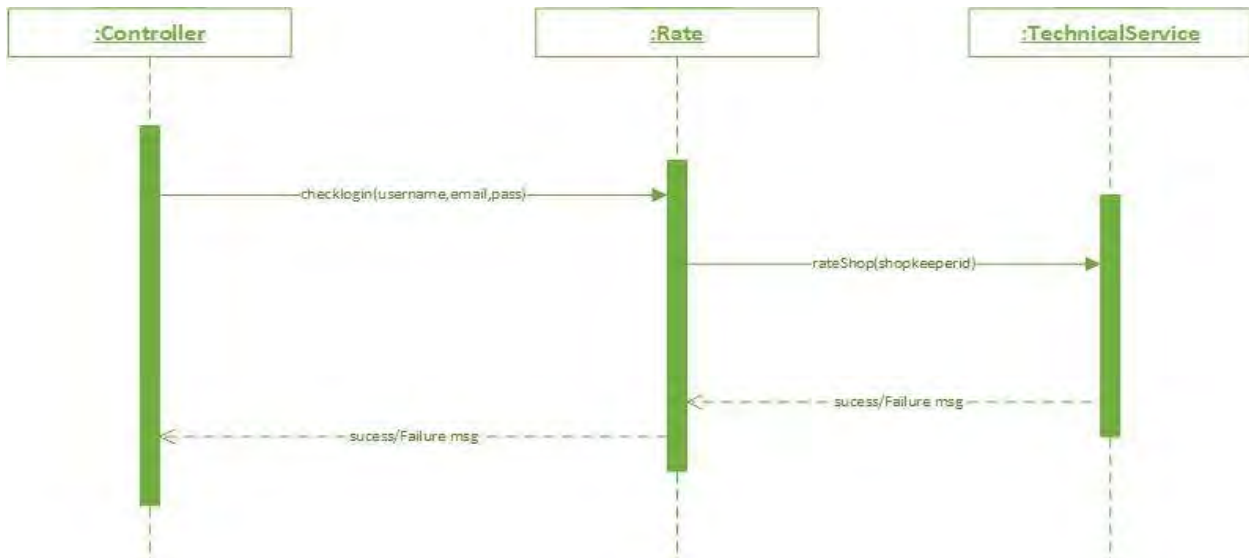


Figure 3. 7 SD for Rate Shop

3. 4. 7 SD: RATE SHOPKEEPER

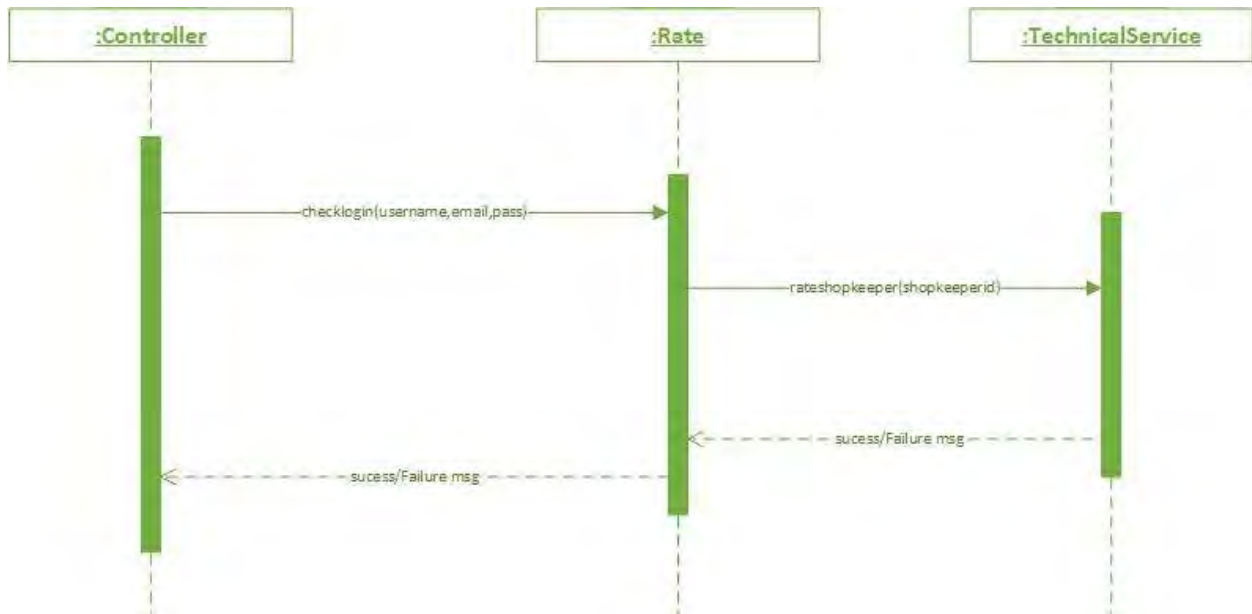


Figure 3. 8 SD for Rate Shopkeeper

3. 4. 8 SD: RATE CUSTOMER

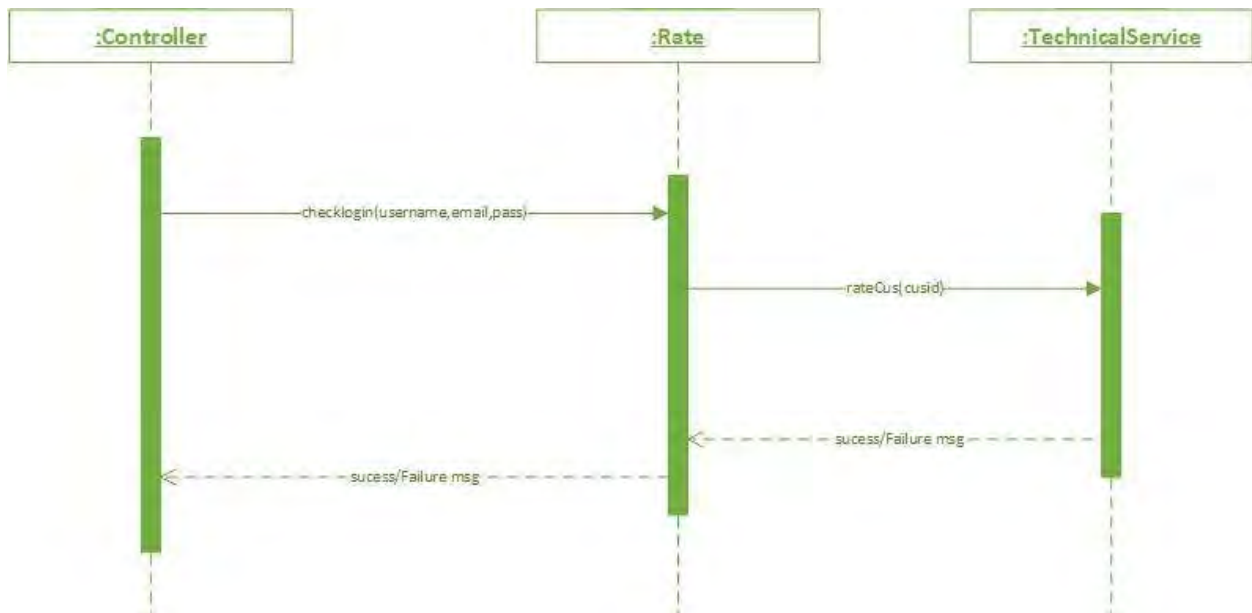
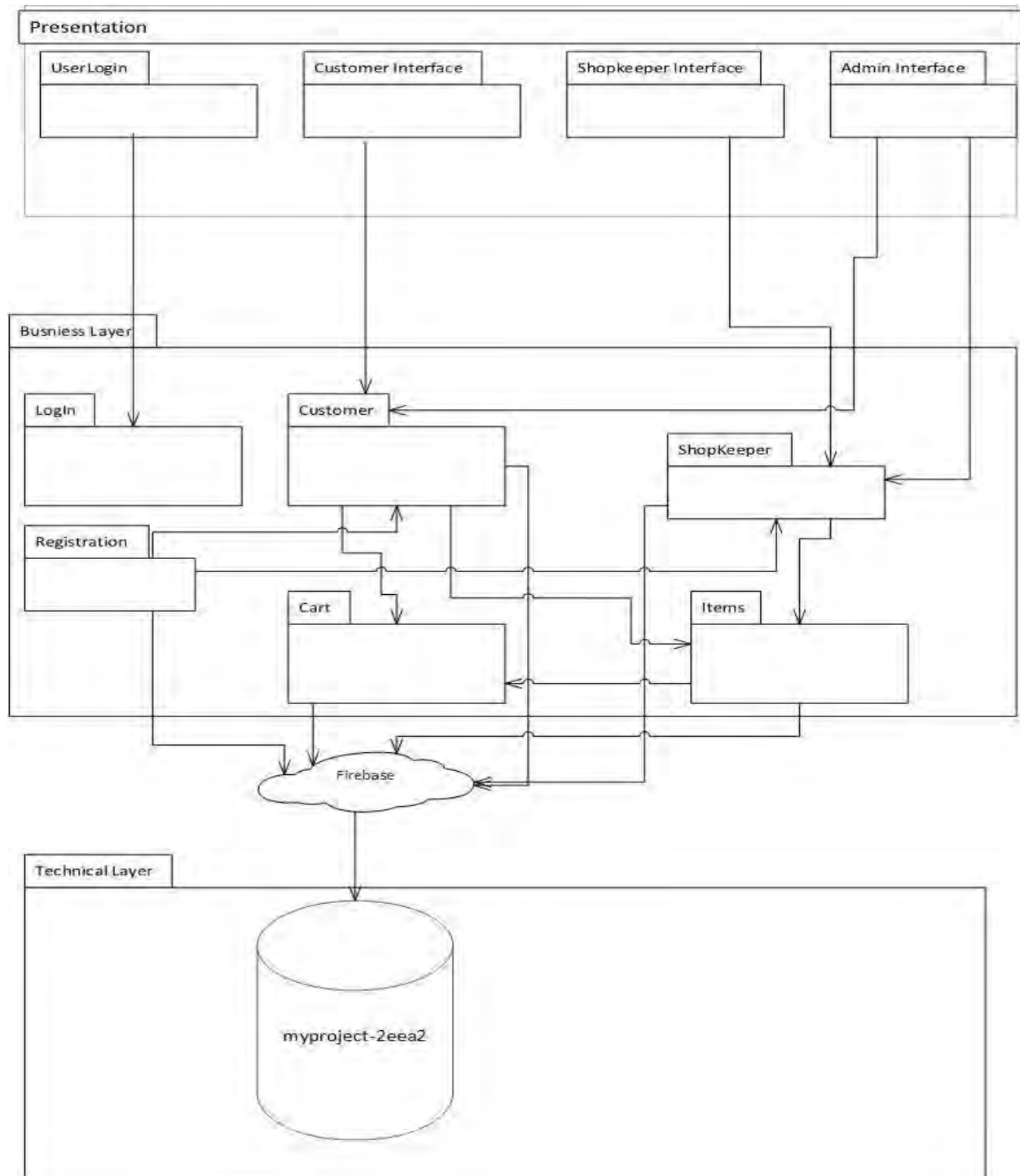


Figure 3. 9 SD for Rate Customer

3.5 ARCHITECTURE DIAGRAM



Fi g 3. 10 Archi t ect ural Desi gn

CHAPTER 4 INTERFACE DESIGN

This chapter describes the project interface design and implementation for developing the eUsedmart. The project implements are in. Android studio with JAVA language is used to develop the android app.

4.1 USER INTERFACE DESIGN

User interface designs shows that how an end user will interact with the system through screens to perform different tasks.

4.2 DESCRIPTION OF THE USER INTERFACES

A user interface is the means in which a user controls a software program or hardware device. User interfaces are designed in such a way that minimum number of steps will give the maximum results.

4.2.1: REGISTRATION

Following Screen Shown to user for the Registration in which he mention his username, email, phone Number, Shop Number and its type whether a Shopkeeper OR the Customer.



Figure 4.1 registration screen

4.2.2: LOGIN

Following Screen is shown to User for the LogIn. User enter the username ,password and type to get his following action.



Figure 4.2 Login

4.2.3: ADVERTISE ITEM

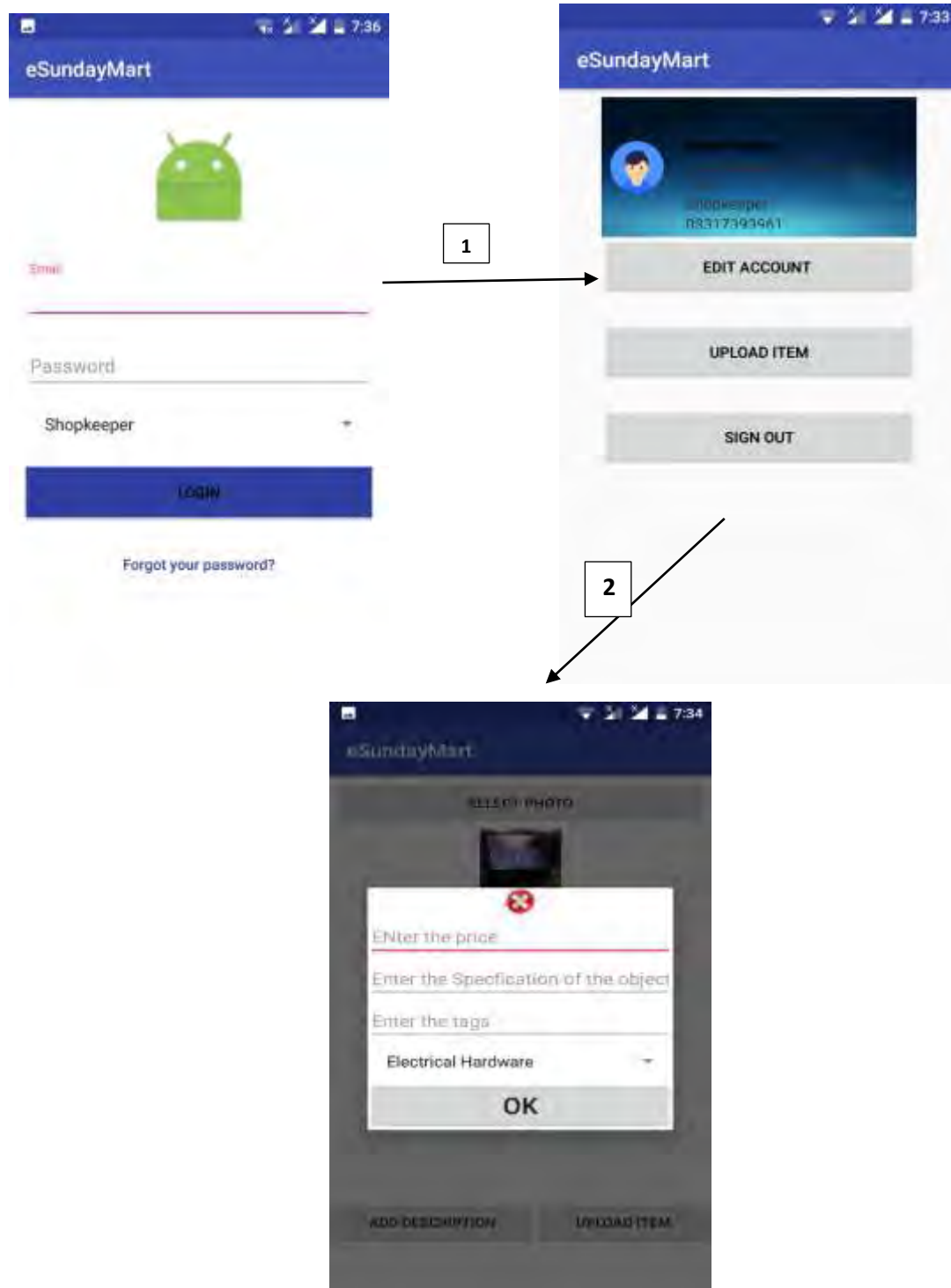
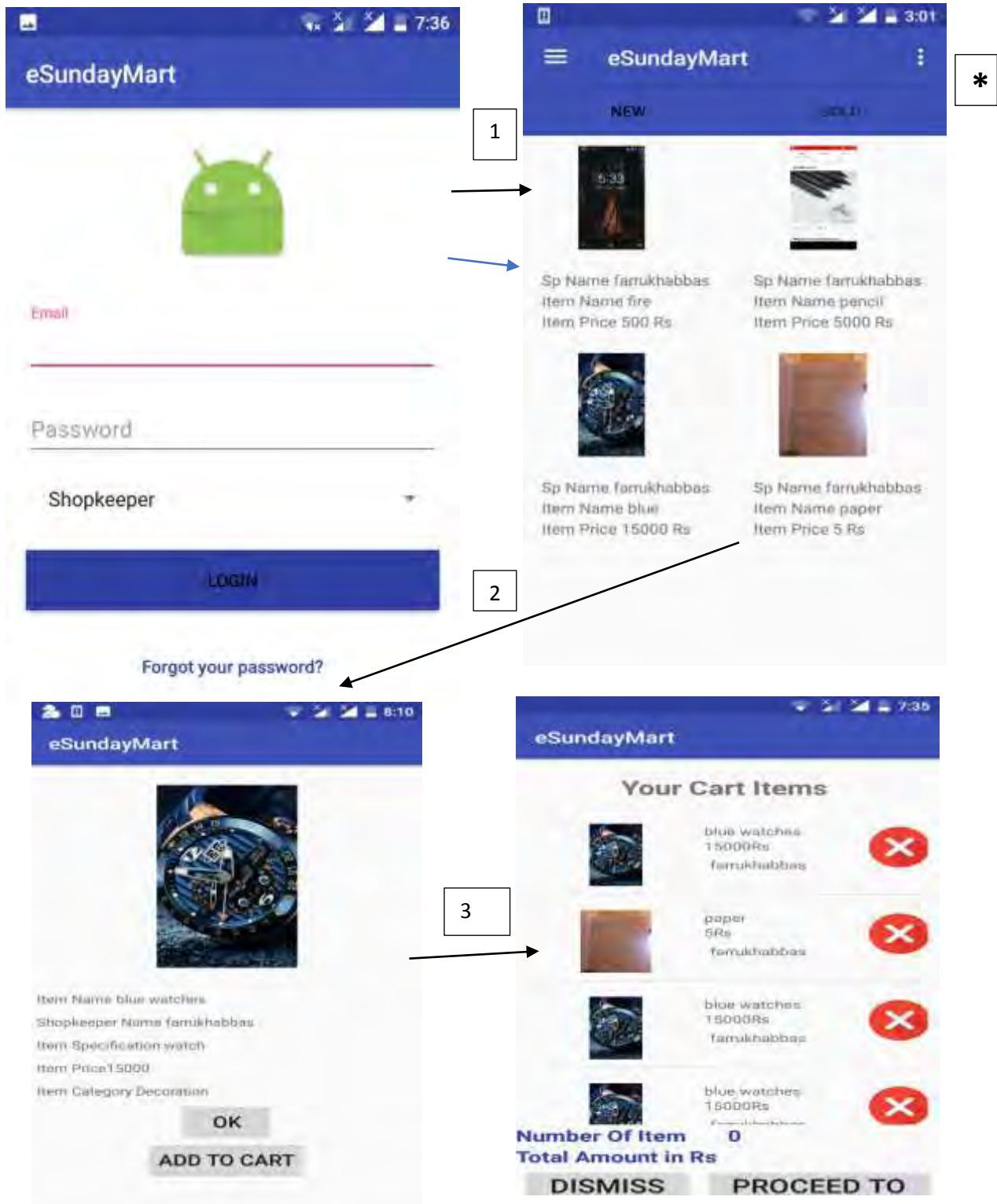


Figure 4.3 Advertise Item

4.4.4: RESERVED ITEM

Fig 4.4 Reserved Items



*. <https://www.androidhive.info/2016/01/android-working-with-recycler-view/>

4.4.4: SEARCH ITEM



Figure 4.4 Search Item

4.4.5: View Item

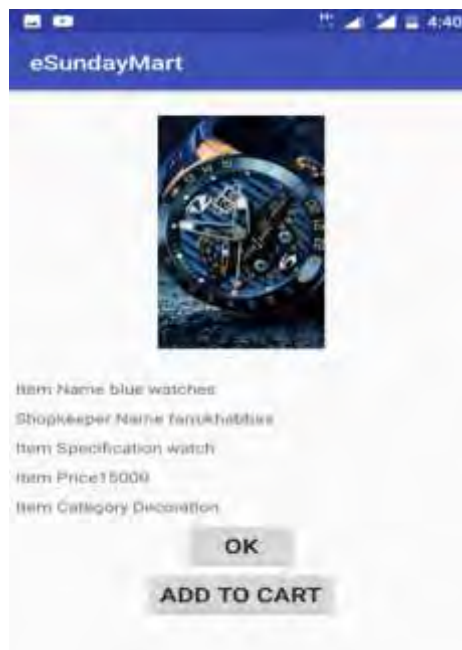


Figure 4.5 View Item

CHAPTER 5 SOFTWARE TESTING

This chapter provide a structural way to test the software. Documentation for software testing helps in estimating the testing effort required. Testing is the process of evaluating a system with multiple inputs and scenarios to find whether it satisfies the specified requirements or not. This document will help the tester to find the errors when he is performing the testing of software

5.1.1 SYSTEM OVERVIEW

System overview focusing on the testing provides an overview of the system in terms of the components that are tested during the unit test

5.1.2 TEST APPROACH

A test approach is the test strategy implementation of a project, defines how testing would be carried out. I will use acceptance test approach for testing the eUsedmart. Acceptance test is a test conducted to determine if the requirements of a specification are met. The main purpose of this test is to evaluate the system's compliance with the business requirements and verify if it is has met the required criteria for delivery to end users.

5.2 TEST PLAN

A test plan outlines the strategy that will be used to test an application, the resources that will be used, and the test environment in which testing will be performed and the time which will spend on testing.

5.2.1 FEATURES TO BE TESTED

The following features are to be tested because these features will take inputs from the end user.

- Login
- Upload image
- reserve item
- Register Users
- Buy item

5.2.2 TESTING TOOLS AND ENVIRONMENT

During testing phase I need a server and internet connection and also an android phone for testing the android application.

5. 3 TEST CASES

These are the test case which will be test.

TC- 1: REGISTER USER 5. 3. 1

Table 5.1 TC-1: register user

Test ID	T001
Actor	Shopkeeper, customer
Test Description	User Register successfully
Setup	Create 2 Users in database: A: Username: Farrukh, password: farrukh4 B: Username: Farrukh3, password: farrukh3
Instructions	A. 1. Actor enters Username "Farrukh". 2. Enters password "farrukh3". 3. Select the Type "shopkeeper". 4. And click register button B 1. Actor enters Username "farrukh3". 2. Enters password "farrukh3". 3. Select the Type "customer". 4. And click Register button
Expected Results	A: user register as a shopkeeper successfully B. user register as a Customer Successfully
Actual Result	A: As Expected B: As Expected

Table 5.2 TC-2: Login

Test ID	T002
Actor	Customer, Shopkeeper
Test Description	User will login successfully.
Setup	<p>Create 2 Users in database: A: Username: Farrukh, password: farrukh4 User type: Shopkeeper Username: farrukh2, password: farrukh2 Usertype: Customer</p>
Instructions	<p>A. 1. Actor enters Username “Farrukh”. 2. Enters password “farrukh3”. 3. Select the Type “customer”. 4. And click Login button</p> <p>B. 1. Actor enters Username “farrukh2”. 2. Enters password “farrukh2”. 3. Select the Type “shopkeeper”. 4. And click Login button</p>
Expected Results	<p>A: Should login to system. B. Should login to system.</p>
Actual Result	<p>A: As Expected B: As Expected</p>

TG-3: ADVERTI SE I TEM 5. 3. 3

Table 5.3 TC-3: upload image

Test ID	T003
Actor	Shopkeeper
Test Description	Item Uploaded
Setup	<p>Create 2 Users in database: A: Username: Farrukh, password: farrukh4 User type: Shopkeeper</p> <p>B: Username: Farrukh3, password: farrukh3 User type: Shopkeeper</p>
Instructions	<p>A.</p> <ol style="list-style-type: none"> 1. Actor enters Username “farrukh”. 2. Enters password “farrukh3”. 3. Select the Type “shopkeeper”. 4. And click Login button 5.click upload image button. 6.select image. 7.click ok <p>AB</p> <ol style="list-style-type: none"> 1. Actor enters Username “farrukh3”. 2. Enters password “farrukh3”. 3. Select the Type “customer”. 4. And click Login button 5.click upload image button. 6.select image. 7.click ok
Expected Results	<p>A: image upload successfully</p> <p>B. image upload fail</p>
Actual Result	<p>A: As Expected</p> <p>B: As Expected</p>

TG 4: RESERVED ITEM 5.3.4

Table 5.4 TC-4: reserved item

Test ID	T004
Actor	Customer
Test Description	Item reserve sucessfully
Setup	<p>Create 2 Users in database: A: Username: Farrukh, password: farrukh4 User type: Customer B: Username:Farrukh3, password:farrukh3 User type: Customer</p>
Instructions	<p>A. 1. Actor enters Username “farrukh”. 2. Enters password “farrukh3”. 3. Select the Type “shopkeeper”. 4. And click Login button 5.click reserve item button. 6.select item. 7.click ok</p> <p>B 1. Actor enters Username “farrukh3”. 2. Enters password “farrukh3”. 3. Select the Type “customer”. 4. And click Login button 5.click upload image button. 5.click reserve item button. 6.select item.</p>
Expected Results	<p>A: item reserve fail B. item reserve successfully</p>
Actual Result	<p>A: As Expected B: As Expected</p>

TG-5: BUY ITEM 5.3.5

Table 5.5 TC-5: Buy item

Test ID	T005
Actor	,customer
Test Description	Item buy successfully
Setup	Create 2 Users in database: A: Username: Farrukh password: farrukh4 B: Username: Farrukh3, password: farrukh3
Instructions	A. 1. Actor enters Username “farrukh”. 2. Enters password “farrukh3”. 3. Select the Type “shopkeeper”. 4. And click login button 5.select item 6.click buy button. 7.click ok button B 1. Actor enters Username “farrukh3”. 2. Enters password “farrukh3”. 3. Select the Type “customer”. 4. And click login button 5.select item 6.click buy button. 7.click ok button
Expected Results	A: unable to buy B. item bought successfully

Actual Result	A: As Expected B: As Expected
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