



PC 641 PROJECT INTERNSHIP  
(WINTER 2018-19)  
MSc (IT) INTERNSHIP PROJECT REPORT  
2018

**Internship Details:**

Internship Start Date: January 5<sup>th</sup>

Internship End Date: May 27<sup>th</sup>

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## INTRODUCTION

eKutir is a for-profit social enterprise group that provides economically sustainable solutions anchored with technology, micro-entrepreneurship, and community engagement. Founded in 2009, we have received numerous awards and recognition for our model, which has reached and impacted thousands of people in the low-income communities.

As a social enterprise group, our innovation transcends interventions in agriculture, food & nutrition, WASH, and enterprise development using digital technology.

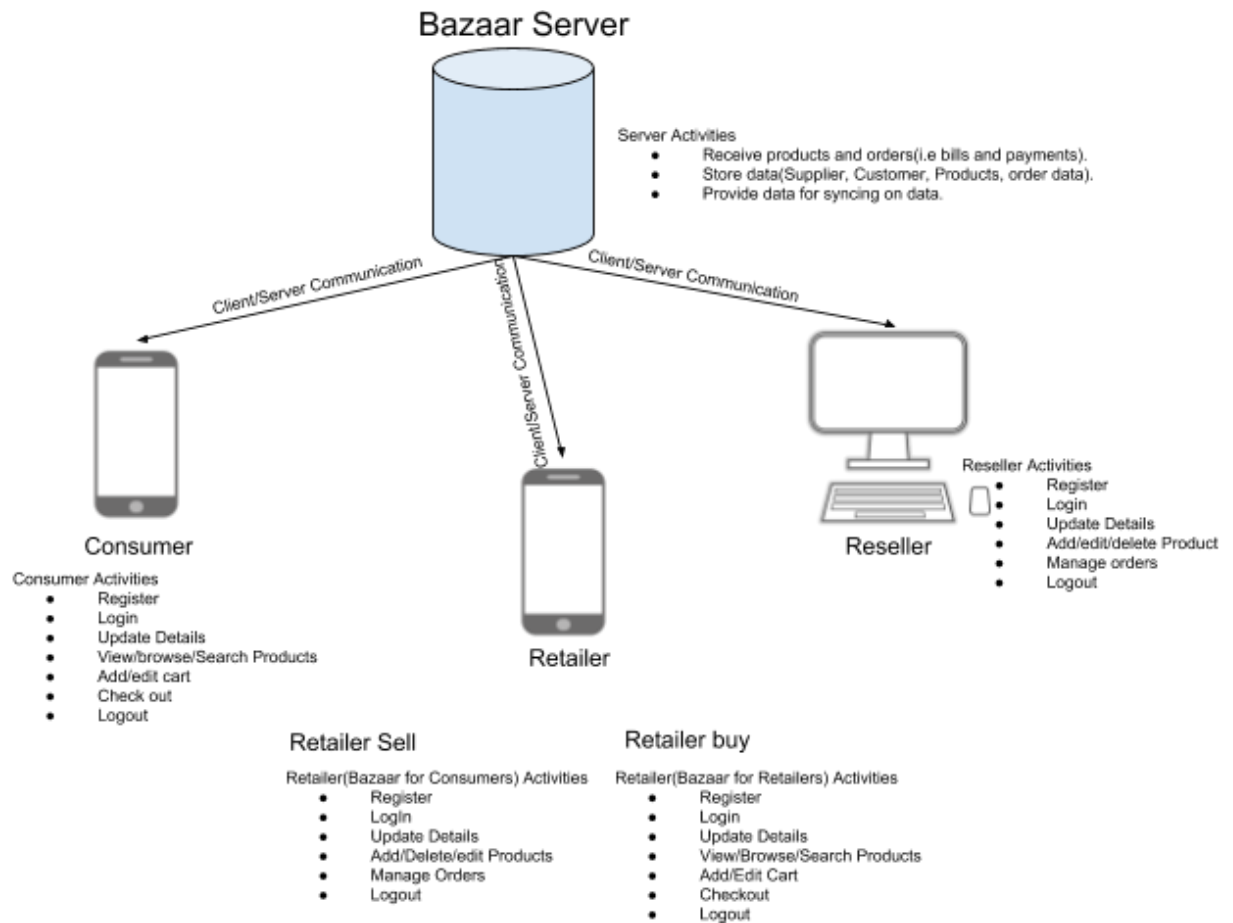
The internship program in eKutir includes relative training and evaluation for two months follows by assigning to live project. The training was divided into two parts:

**I** From 5<sup>th</sup> January to 5<sup>th</sup> March, I worked in Web platform called Sanimark. Which is a ecommerce platform of sanitation products. Which includes JSP, JS and JAVA Spring framework.

**II** After 5<sup>th</sup> March, I worked in Bazaar Platform of eKutir. The Bazaar application is composed of three main components: A) Bazaar for Retailers where reseller works on web platform and retailer uses android platform. B) Bazaar for consumers where both retailers and consumers work on android platform C) A server-side application which will support and interact with various features of the application. The system is designed to create an end-to-end marketplace for farmers. Potential scenarios include adding a product to the platform by supplier, ordering products from the platform by ME or Customer, checkout the items added to the cart by customer.

I have worked in JAVA using Spring Framework using MySQL database. I created APIs for the Android platform as well as WEB platform.

## CONTEXT DIAGRAM



This Context shows the entire flow of the Bazaar Platform.

## SCOPE STATEMENT

### Project Scope Description

Bazaar Platform is end to end market place for the farmer.

The system is divided in three major part:

Bazaar have four Users- Admin, Supplier, ME(Micro Entrepreneur), Customer	
User - Admin	Admin can check state wise report.
	Privilege: <ul style="list-style-type: none"> <li>- Approve Suppliers</li> <li>- Approve Products</li> <li>- Approve Items</li> <li>- Approve Items</li> </ul>
User - Supplier	Supplier can supply products to the ME and directly to the Customers.
	Privilege: <ul style="list-style-type: none"> <li>- Add Products, Items</li> <li>- Sell Products, Items</li> <li>- Can Bid on the demand generated by the ME.</li> </ul>
User - ME	ME can sell the Products to the Customers directly.
	Privilege: <ul style="list-style-type: none"> <li>- Can generate Demand</li> </ul>
User - Customer	Customer purchase products from ME and Supplier.

## Product Functions

### Bazaar for Retailers:-

- Retailer/Reseller should be able register himself/herself on the platform.
- Reseller should be able to add products to the platform.
- Reseller should be able to edit/ delete certain details of a particular product.
- Retailer should be able to view/ browse/search products on the platform.
- Retailer should be able to add/delete/edit items in his/her cart.
- Retailer should be able to checkout of his cart either via Cash On delivery/ Online Payment.
- Retailer should be able to sell the products he brought from reseller.
- the user (Both Reseller and retailer) should be able to view/edit his personal details.
- Admin should be able to approve/disapprove the registrations on the platform. ● Admin should be able to view his/her dashboard.
- Admin should be able remove products/users (Retailers and Resellers) on the platform whenever required.
- If the customer requires a product and that product is not available in a radius of 4cm from the user then the system checks for reseller who are available in 4 cm radius and are ready to sell to the customers (If the reseller is selling products direct to consumers then the system asks for the price for which he wants to sell the product for i.e. Consumer MRP) (Here in this case the reseller is considered as retailer)

#### Bazaar for Consumers:-

- Consumer should be able to view/ browse/search products on the platform.
- Consumer should be able to add/delete/edit items in his/her cart.
- Consumer should be able to checkout of his cart either via Cash On delivery/ Online Payment.
- The user (Retailer, Consumer) should be able to view/edit his personal details on the platform.
- Admin should be able to approve/disapprove the registrations on the platform.
- Admin should be able to view his/her dashboard.
- Admin should be able to remove products/users (ME's and Sellers) on the platform.

### **DETAILED USE CASE**

The system supports six types of user privileges,

Consumer, Retailer, Reseller, Admin, Master Franchise, Super Admin.

Consumer will have access to Consumer functions, Reseller will have access to reseller functions, Retailer will have access to retailer functions based on the platform, Admin will have access to admin functions, Master Franchise will have access to master franchise functions and Super Admin will have access to super Admin Functions.

#### Bazaar for Consumers

The Consumer should be able to do

- Register.
- Login.
- View/Browse/Search Products.
- Add/Delete/Edit items in the cart.
- Checkout.
- View History
- View Advertisements.
- View Notifications.
- Logout.

The Retailer should be able to do

- Register.
- Login.
- View/Browse/Search Products.
- Add/Delete/Edit items in the cart.
- Checkout.
- Logout.
- View History
- View Advertisements.
- View Notifications.
- Add Customers.
- Message Customers.

#### Bazaar for Retailers

- The Reseller should be able to do
- Register.
- LogIn.
- Add Products to the platform.
- Edit details of the product.
- Delete products added to the platform
- View DashBoard.

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- View History
- View Advertisements.
- View Notifications.
- Logout.

The Retailer should be able to do

- Register.
- Login.
- View/Browse/Search Products.
- Add/Delete/Edit items in the cart.
- Checkout.
- View History
- View Advertisements.
- View Notifications.
- Logout.

Functionalities of users common both to Bazaar for consumers and bazaar for retailers.

The Admin should be able to do

- Login
- Approve/Disapprove Users
- Approve/Disapprove products added by sellers.
- View DashBoard
- View History
- View Notifications.
- Logout

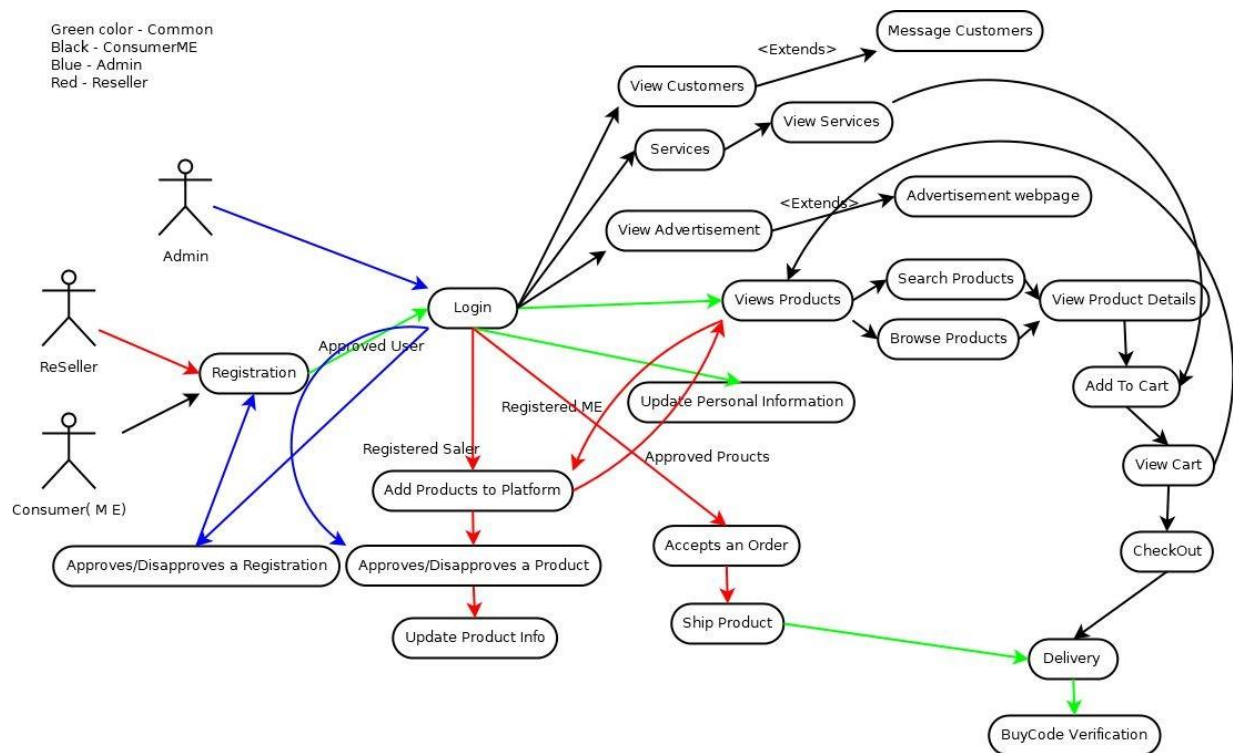
The Master Franchise should be able to do

- Login
- View the activities of Sellers, ME's, Admins.
- View DashBoard
- Logout

The Super Admin should be able to do

- Login
- View Activities of Sellers, ME's, Admins and Master Franchises.
- Logout

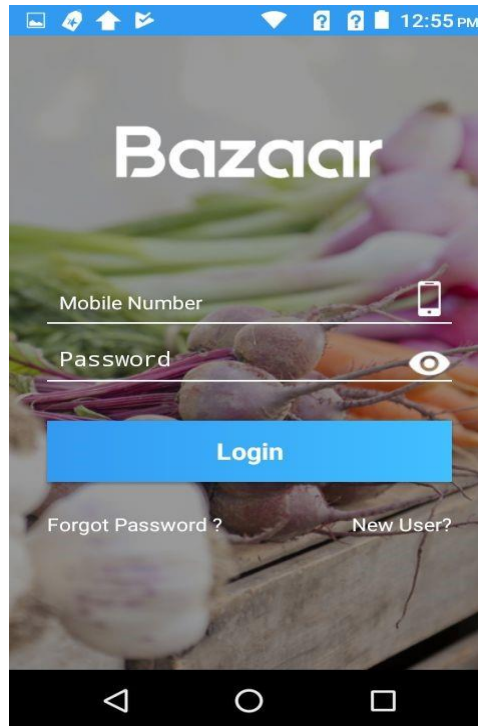
## Basic Flow Diagram



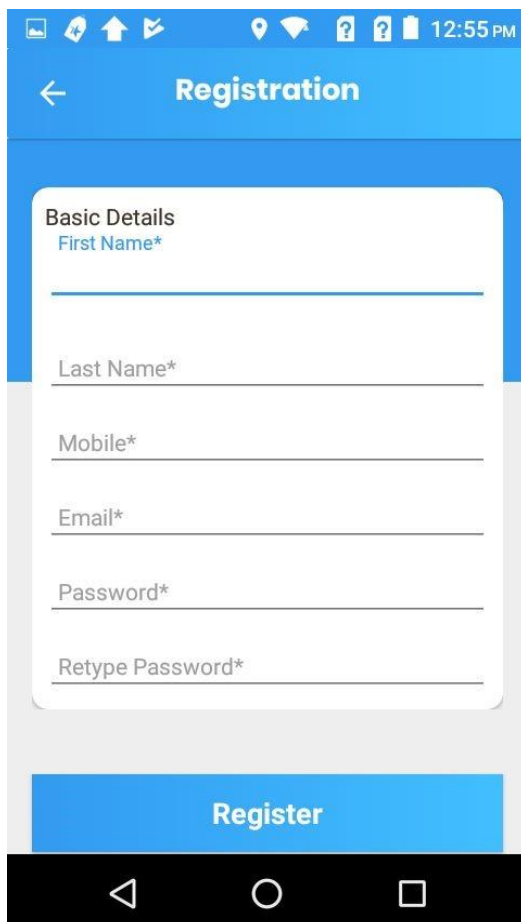


## DESIGN CONTRIBUTION

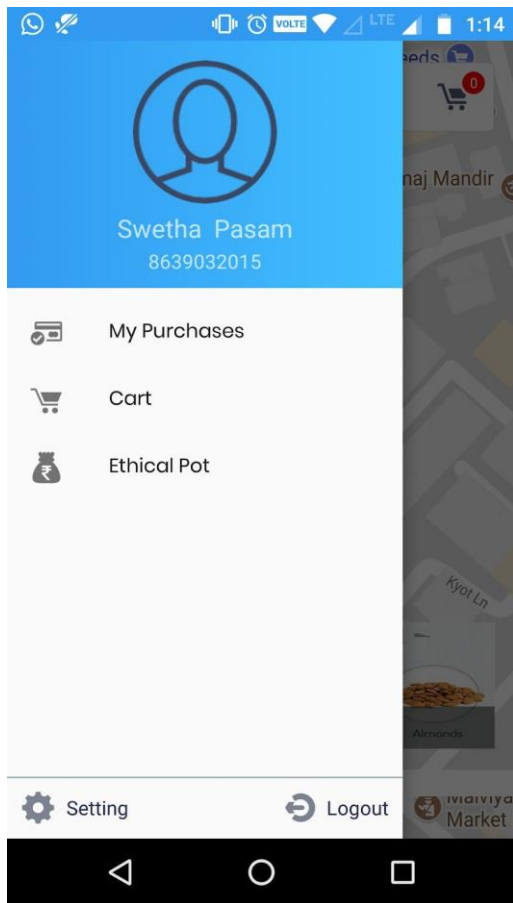
- **User Interface**  
Bazaar for Consumers  
Welcome Screen:-



**Registration page:-**

A screenshot of a mobile application's registration page. The page has a blue header with a back arrow and the word "Registration". Below the header, there is a white rounded rectangle containing the registration form. The form is titled "Basic Details" and includes the following fields: "First Name\*", "Last Name\*", "Mobile\*", "Email\*", "Password\*", and "Retype Password\*". A blue "Register" button is located at the bottom of the form. The page is framed by a blue status bar at the top and a black Android navigation bar at the bottom.

### Menu bar:



## **TOOLS, TECHNOLOGIES, API and LIBRARIES**

### **Tools**

STS (Spring Tool Suit)  
Admirer - MySQL  
Bit-Bucket  
2-Factor (SMS Service)  
Amazon Web Service  
Spring Boot

### **Technology**

Framework: **Spring Framework**  
Programming Language: **JAVA, JSP, JS**

### **API**

**JPA(JAVA Persistent API)**  
2 Factor API,  
FCM API,  
PayUmoney API  
GOOGLE PLACES API

### **Libraries**

Spring Framework  
Java Persistent  
Log4j

## **TESTING STRATEGIES and REPORT**

Team is working with Incremental Process Model.

### **LESSON LEARNT**

- Learn to work by using Spring Framework
- Learn JPA
- Learning MVC framework and different Libraries.
- Learnt how to understand, debug and work on the existing code which consists of various integrated technologies or libraries.
- Learn practical implementation of Incremental Software Methodology with the live project.
- Quick Learning and finding the resources or the means to meet the client requirements on time.