



**PAF-Karachi Institute of Economics & Technology**

**Department of Computer Science  
Course Project Proposal Form**

# **SOFTWARE REQUIREMENT SPECIFICATION FOR ONLINE SHOPPING PORTAL.**

Prepared by

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Proposed to

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# **1. Introduction**

## **1.1 Purpose**

The purpose of the Inventory Management system is to serve Users efficiently .It provides the interface to users in a graphical way to manage the daily transactions as well as historical data. Also provides the management reports like monthly inwards, monthly deliveries and monthly returns. This application maintains the centralized database so that any changes done at a location reflects immediately. This is an online tool so more than one user can login into system and use the tool simultaneously. The aim of this application is to reduce the manual effort needed to manage transactions also this application provides an interface to users to view the details like the daily Stock Statements of all transactions.

## **1.2 Product Scope**

- It is a small offline Inventory Management system
- It is use only in one shop
- In this software Secure Registration and profile management facilities for admin and users.
- Users after login only see Product Items and Quantity are available
- Any changes made to the requirements in the future will have to go through a formal change approval process. The developer is responsible for asking for clarifications, where necessary, and will not make any alterations without the permission of the client
- The scope of this system to allow the stock management departments to manage gowdowns, inwards info, delivers info, order cancellation info, damages info and generate the reports dynamically by updating the info very effectively with user friendly screens.
- Complain mechanism, so that Users can give complain for the product or service which they have purchased.

Also facility rating of individual products by relevant Users.

### 1.3 Acronyms and Abbreviations

Acronym	Meaning
IMS	Inventory Management System
C#	C#.Net MVC 5
SQL	SQL Server
HTTP	Hypertext Transfer Protocol

Database - A collection of related data stored in one or more computerized files in a manner that can be accessed by users or computer programs via a database management system.

Database management system - An integrated set of computer programs that provide the capabilities needed to establish, modify, make available, and maintain the integrity of a database.

### 1.5 Document Conventions

This document follows the IEEE standard. Bold faces used to emphasize section and sub-section headings. Highlighting is to point out words in the glossary and italicized text used to label and recognize diagram and tables.

### 1.4 References

- IEEE 830-1998 standard for writing SRS document.
- *Fundamentals of Software Engineering*

### 1.5 Technologies to be used

- Programming languages:
- C#: C#.Net is a programming platform— part of the MVC 5 framework for developing and running distributed multi-tier architecture web application
- HTML, XML: Hyper Text Markup Language and Extensible markup Language are the predominant

markup languages for web pages. It provides a means to describe the structure of text-based information in a document and to supplement that text with interactive forms, embedded images, and other objects.

- SQL Server: Sql server is used to create Database **Tools & Development Environment**
- Microsoft Visual Studio: Microsoft Visual Studio is a toolkit which is designed for the creation of complex projects, providing fully dynamic web application.

## 2. OverallDescription

- 2.1 Product Perspective
- IMS is aimed towards the vendors who want to reach out to the maximum cross-section of Users and common people who can be potential Users. This project envisages bridging the gap between the seller, the retailer and the Users. IMS should be user-friendly, 'quick to learn' and reliable software for the above purpose. IMS is intended to be a stand-alone product and should not depend on the availability of other software. It should run on Windows based platform.

## 2.2 Product Functions

- User: Administrator
- **Functions**: The Administrator is the super user and has complete control over all the activities that can be performed. The application notifies the administrator of all shop creation requests, and the administrator can then approve or reject them. The administrator also

manages the list of available product categories. The administrator give permission of employees like update, edit or delete.

- User: Users
- **Functions**: A Users can browse through the shops and see all product category and quantity that how much Quantity available and a Users is prompted to login. Also, the Users can modify personal profile information (such as phone number and password) stored by the application.
- User: Employees
- **Functions**: Administrator give some employee some permission. According to the given permission An Employee perform a job(like Sell a new product, Add Users Purchase department under a Purchase manager to overlook purchasing activities if warehousing needs arise.

## 2.3 User characteristics

- The user should be familiar with the using of Computer related terminology like Transaction etc.
- The user should be familiar with the Internet.

## 2.4 Constraints

- There is no maintainability of back up so availability will get affected.
- Limited to HTTP/HTTPS.
- Real-life credit card validation and Banking system is

not implemented.

- No multilingual support
- All payment on cash not on line

## 2.5 Operating Environment

The IMS is a website that shall operate in all famous browsers, for a model we are taking Microsoft Internet Explorer versions 7.0, 8.0 and 9.0 .And Google Chrome.

## 3. Specific Requirements

### 3.1 Functional Requirements

#### 1.Administrator:

- **Database Management:** Control the database and keep track of all records of Users and employee details.
- **Contact and Giving Permission to Admin:** Contact with the admin and give permission to sell their product under the site after testing the product's quality.
- **View all details:** View the details of all employees and control the whole site.
- **Advertising the Site:** Responsible for making advertisements for the site.

#### 2.Users:



- **Login:** Users must have a valid login id to enter into the site.
  - **Registration:** New users can sign up by creating new ID.
  - **View and edit Own Details:** Can view/edit his personal details, payment details, and details about services provided.
  - **Choosing and comparing products:** Can view all available products and can compare them and make a choice for purchasing products.
  - **Purchasing:** Can purchase any product through cash.
  - **Giving Feedback to Users Care:** Can give feedback after login a feedback box show to Users than Users give feedback.
  - **Logout:** Users must logout of the site after purchasing products.
1. The System holds all the details of the all the employees who are working in the organization.
  2. It allows admin to manage two types of users, hold their details, authenticate these users at the time of login and accordingly provide different options.
  3. It holds the details of all the stocks which are part of our IMS.
  4. It allows the admin to view the list of users and take the print.
  5. It allows admin to generate stock details report.
  6. It allows admin to generate inwards details report.
  7. It allows admin to generate outwards details report.

8. It allows admin to generate returns details report.
9. It allows admin to generate stock statement report.
10. It allows any user to logout when he wants to come out from the system

## **3.2 Non-functional Requirements**

### **3.2.1 Performance Requirements**

- The system shall accommodate high number of items and Users without any fault.
- Responses to view information shall take no longer than 5 seconds to appear on the screen.

### **3.2.2 Safety Requirements**

- System use shall not cause any harm to human users.

### **3.2.3 Security Requirements**

- System will use secured database
- Normal users can just read information but they cannot edit or modify anything except their personal and some other information.
- System will have different types of users and every user has access constraints.

### **3.2.4 Error handling**

IMS shall handle expected and non expected errors in ways that prevent loss in information and long downtime period.

## **SOFTWARE REQUIREMENTS**

Database: SQL

Front end: MVC .Net, HTML, DHTML, Java Script

Editor: Edit plus 3.2

## **HARDWARE REQUIREMENTS**

Core 2 duo or above processes architecture

1. 1GB GB RAM.
2. 160 GB Hard Disk Space.
3. Ethernet card.

## **4. Interfaces Requirements**

The System after careful analysis has been identified to present with the following Interface

### **4.1 User Interface**

#### **4.1.1 Employee Interface:**

The Interface of Employee maintains all the information which belongs to the employees who are working for the shop. It allows the administrator to add an employee record to the database very easily and it allows to view the list of employees in tabular format out of which he can edit a particular employee. Admin can take the print of employee report just by making a single on print icon and It also allows the administrator to remove an employee from list. It makes all the above can be done very flexibly.

### **4.1.2 Stock Interface:**

This Interface maintains all the information related to manage stock done in the go downs. All the stocks are recorded to database and can be viewed as a report that displays all the stocks made by the company at each go down. It facilitates the user to select stock id from the list which prevents entering invalid stock ids and allows the user to select the directly from a calendar which reduces lot of confusion in date formats and all. It doesn't allow admin to enter the above details.

### **4.1.3 Administrator Interface:**

This interface is used to manage the details of users of the application. Users are divided into two categories.

**(i)Admin**

**(ii) Normal user**

It allows administrator to add a new user, view the list of user and delete a user from the list. It allows sending a print request to the printer for printing user report.

### **4.1.4 Reporting Interface:**

This interface used to provide reports required by the users. It provides a facility to generate dynamic reports like information about the available products, monthly inwards, monthly deliveries, and stock statements very easily.

### **4.1.5 Login:**

This interface will consist of two compulsory fields namely, "User Name" and "Password". There will also be options for "New User's Registration" which will redirect to "Registration" If the password entered is correct the Main User Interface opens up else an error message is displayed.

## **4.1.6 Personal Data Editing**

If any member wants to change his personal information he can enter his profile by clicking on his name at the top right of the main page and he will be directed to the personal details editing page.

## **4.1.7. Search**

The Users can enter the type of item he is looking for and the specifications he is interested in them he can click on “Search”. User can also use advanced search for more options. For eg: the user can filter the results basing on various aspects such as size, color , material, brand etc and also they can sort the product display according to their wish (relevance, price in ascending or descending, popularity

## **4.2 Communication Interfaces**

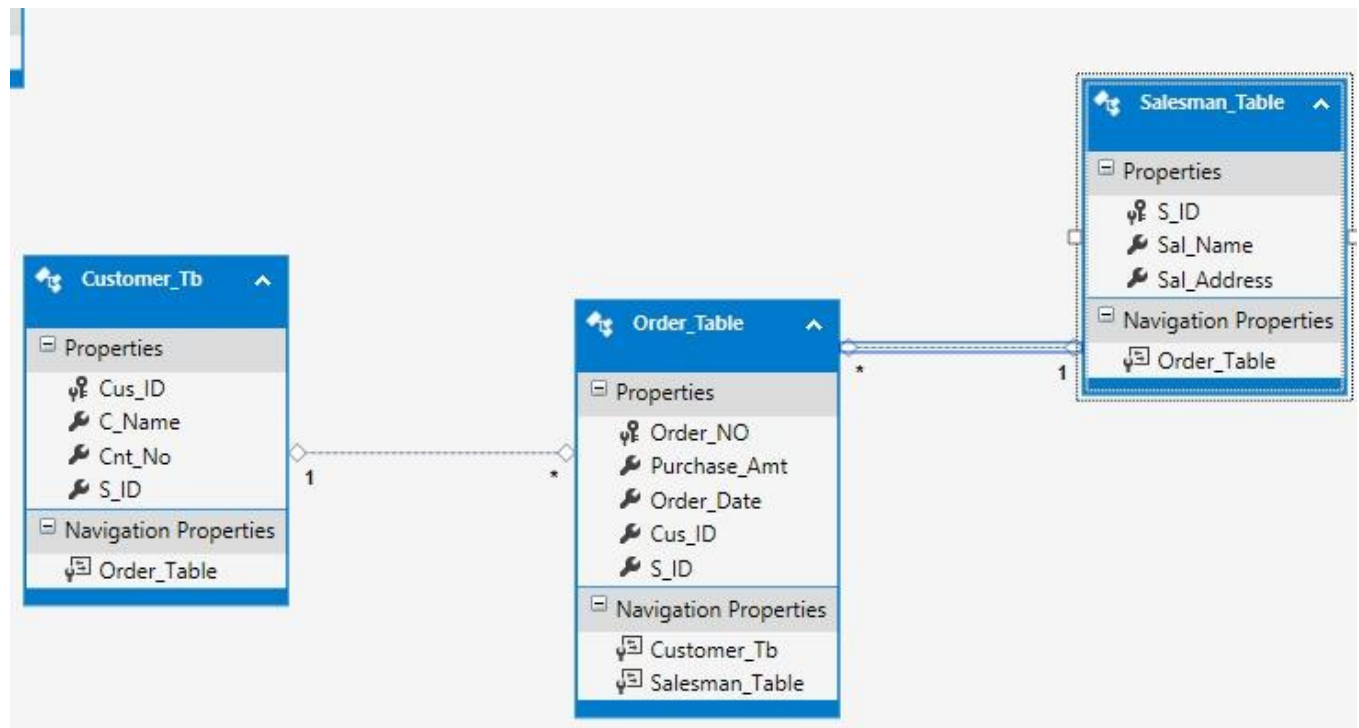
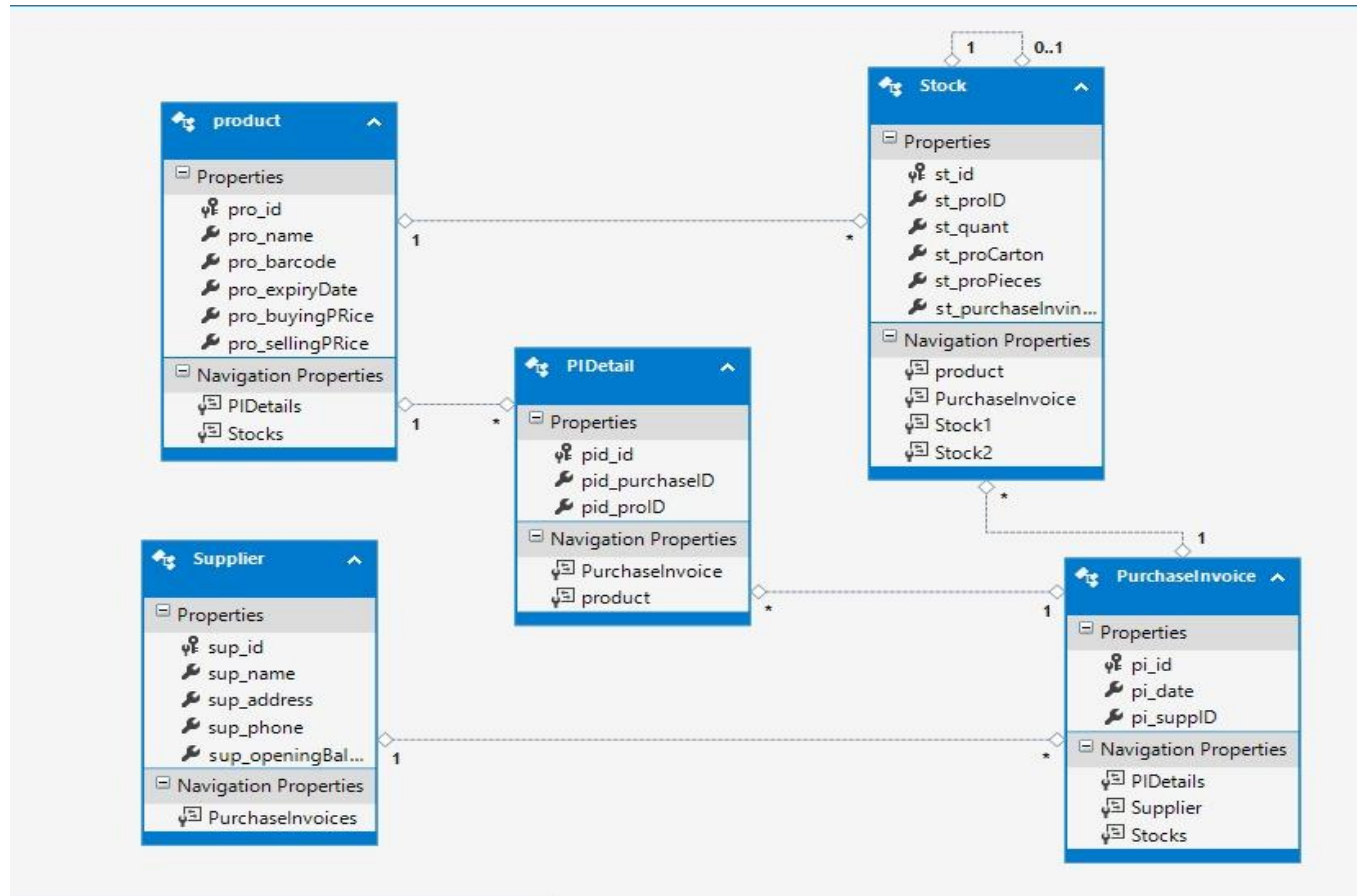
The system will use the communications resources provided by the IMS data centre. This includes, but is not limited to

- ☐ HTTP protocol for communication with the web browser and the web server.
- ☐ TCP/IP network protocol with HTTP protocol.
- ☐ SMS Gateway for communication among android phones for argent events without an Internet connection.

# **5. Other Things**

## **5.1 ERD DIAGRAM**

### 5.1.1 Actual

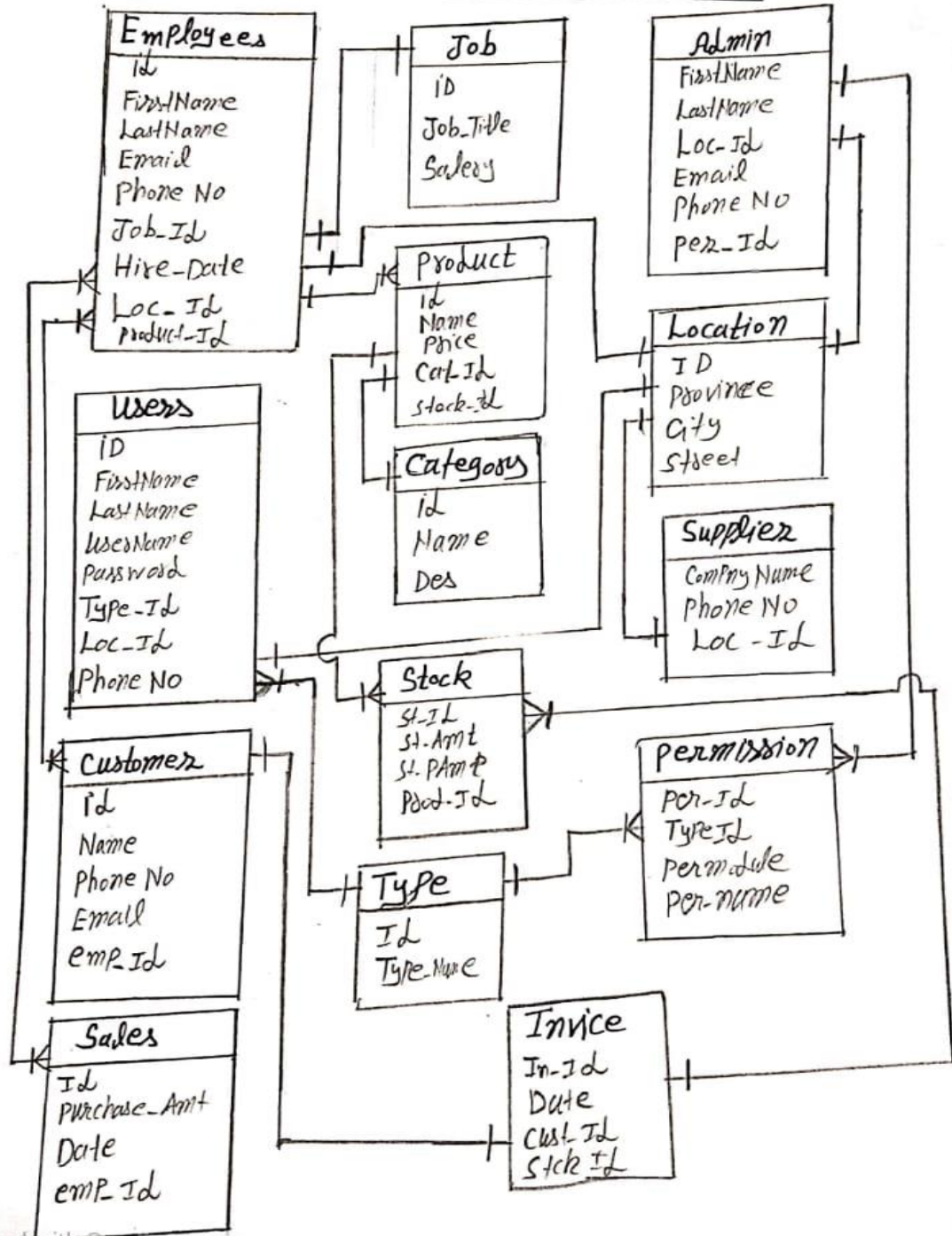


### 5.1.2 Enhanced

# ERD - Diagram

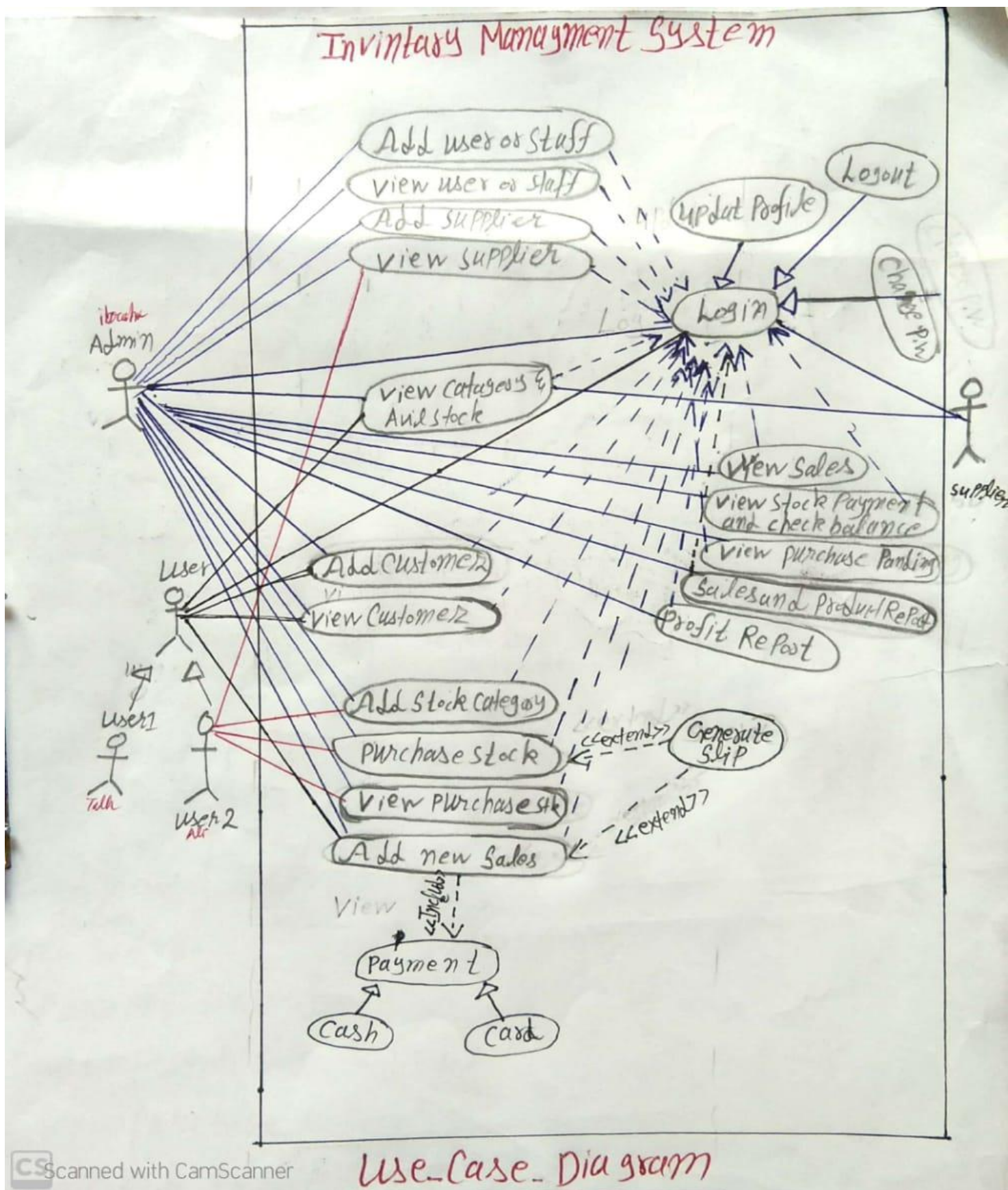
M. Jibraheem (9389)  
Abif Kasi (9478)

## Inventory Management System



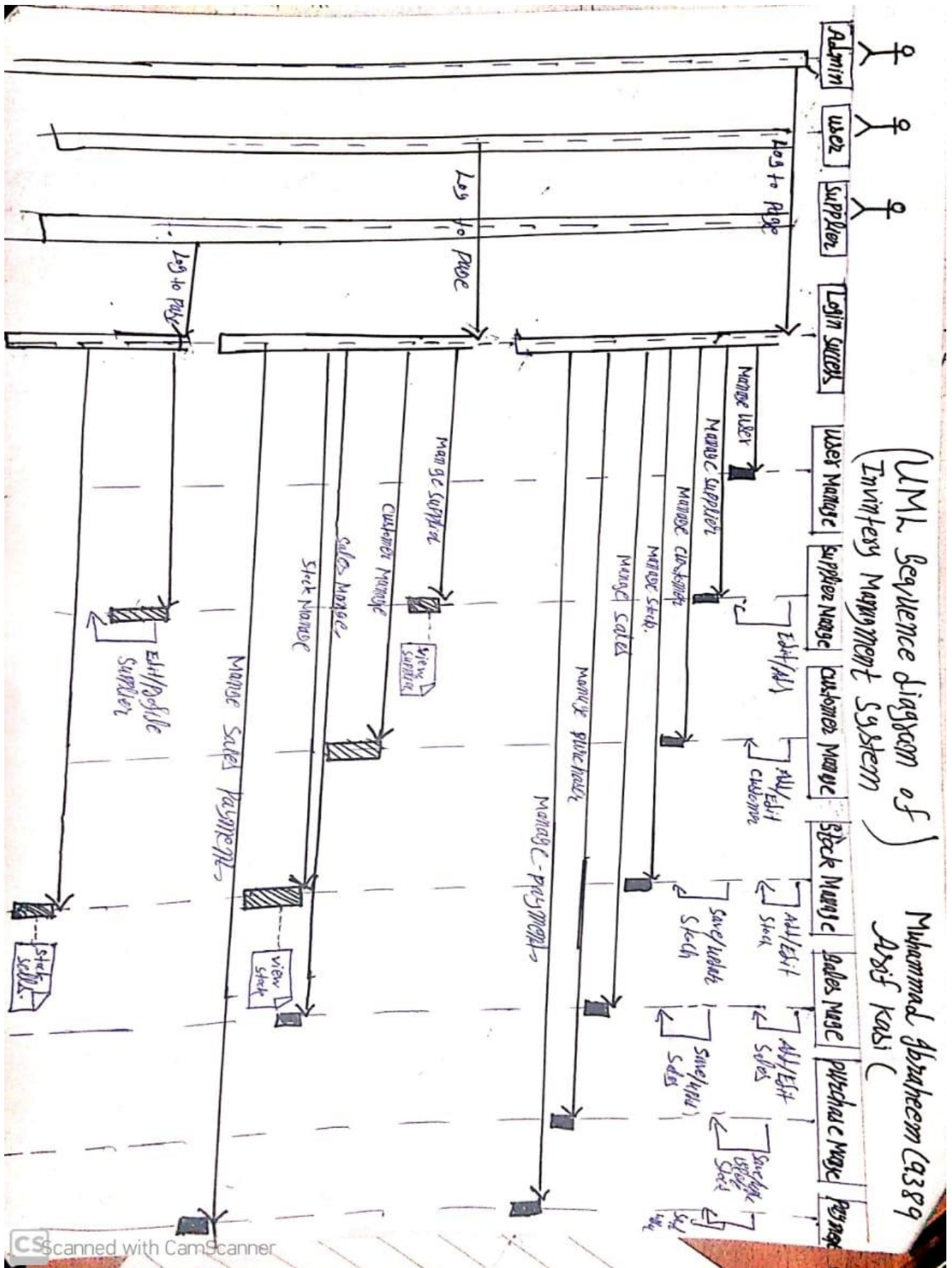


## 5.2 USECASE DIAGRAM

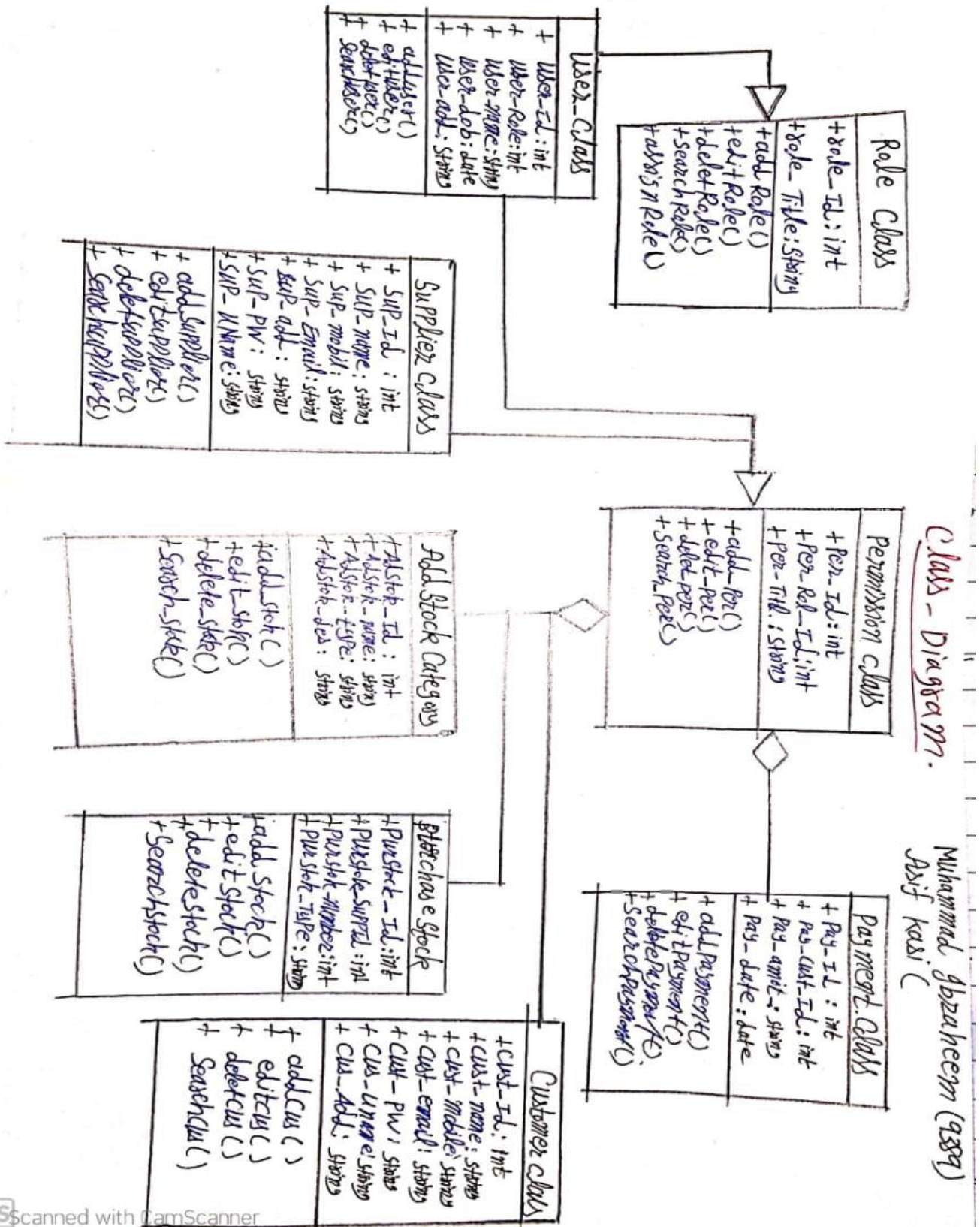




### 5.3 SEQUENCE DIAGRAM



## 5.4 CLASSDIAGRAM



## 5.5 Form, Boundary and control class

### ORDER FORM:

Order ID	<input type="text"/>	Auto Generate
Product Type	<input type="text"/>	Drop down
Product	<input type="text"/>	Drop down
Price	<input type="text"/>	Auto Generate
Quantity	<input type="text"/>	Selection
<input type="button" value="Add"/>	<input type="button" value="Clear"/>	Button
Total	<input type="text"/>	Auto Generate
<input type="button" value="Pay"/>	<input type="button" value="Generate Slip"/>	Button

#### Control

Order product
Add order()
view order()
delete order()
update order()
calculate order(value)
get()

#### boundary

Order product
New order()
view order()
update order()
review order()
get()
make payment()

## 5.6 Use Case Narration

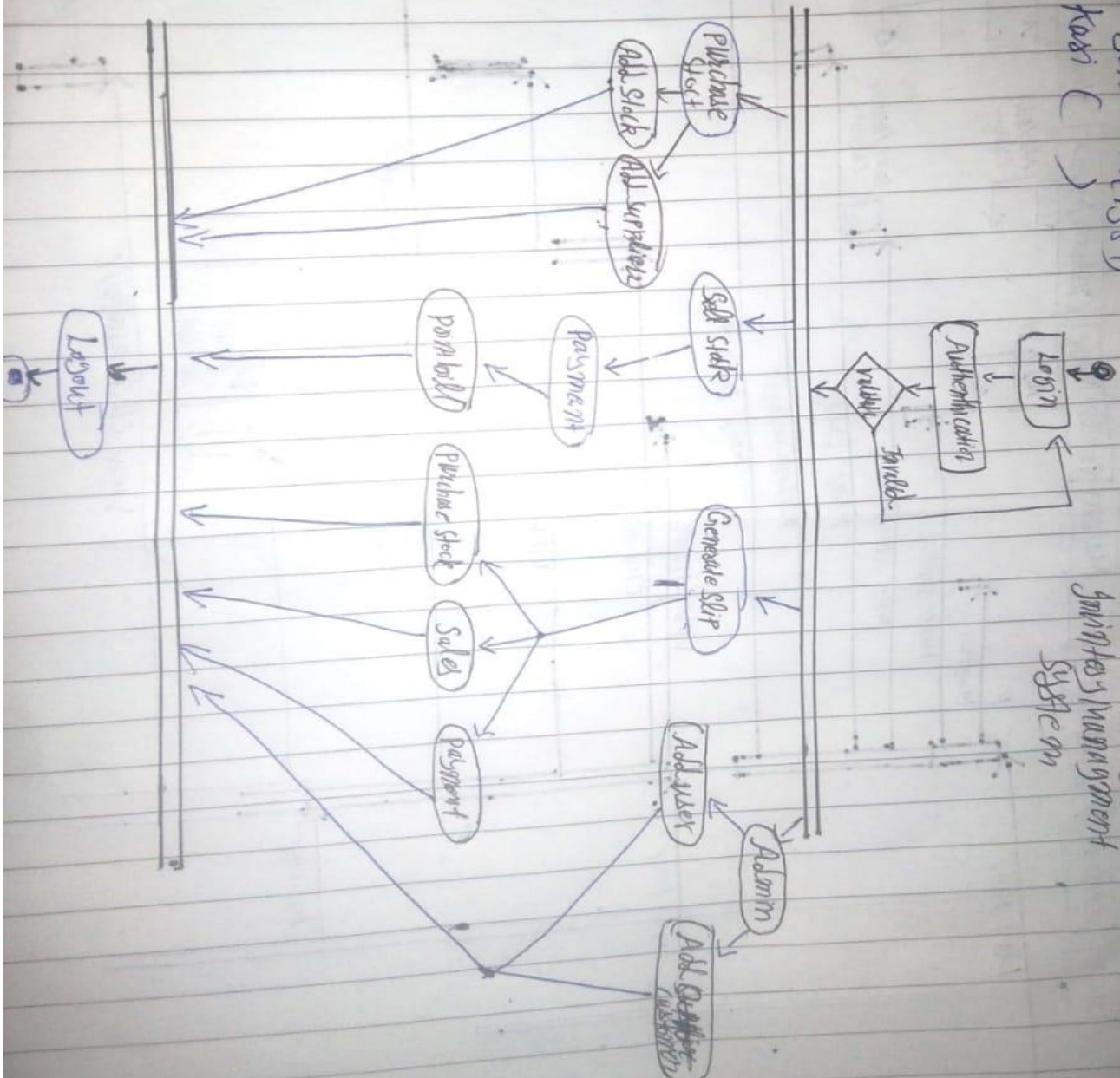
Users Actor	System Actor
<p><b><u>Step#01:</u></b> Users request the option to enter a new order.</p> <p><b><u>Step#03:</u></b> Users select the product type on the dropdown.</p> <p><b><u>Step#05:</u></b> Users select the product</p> <p><b><u>Step#07:</u></b> Users enters the quantity of product.</p> <p><b><u>Step#09:</u></b> Users have an option to add the selected item to cart for further shopping, clear the form or pay.</p> <p><b><u>Step#11:</u></b> If Users selects online payment.</p> <p><b><u>Step#13:</u></b> Users enters the data for transition.</p> <p><b><u>Step#15:</u></b> If Users selects an offline payment method.</p>	<p><b><u>Step#02:</u></b> The system responds by displaying the item form and get order ID from database and print in the textbox.</p> <p><b><u>Step#04:</u></b> The system sends the product with respect to selected Product type.</p> <p><b><u>Step#06:</u></b> The system sends the price of a product.</p> <p><b><u>Step#08:</u></b> The system checks the quantity of selected product is available in stock or not. If available then calculates the price and shows in the textbox.</p> <p><b><u>Step#10:</u></b> The system shows the Payment method</p> <p><b><u>Step#12:</u></b> The system asks transition data and wait.</p> <p><b><u>Step#14:</u></b> Check the data is valid or not if valid then proceed and generate the slip which order have and also save in database with the status.</p> <p><b><u>Step#16:</u></b> The system generates slip and also save in database with the status</p>



## 5.7 ACTIVITY DIAGRAM

Muhammad Shabaneem (9389)  
Arif Kazi ( )

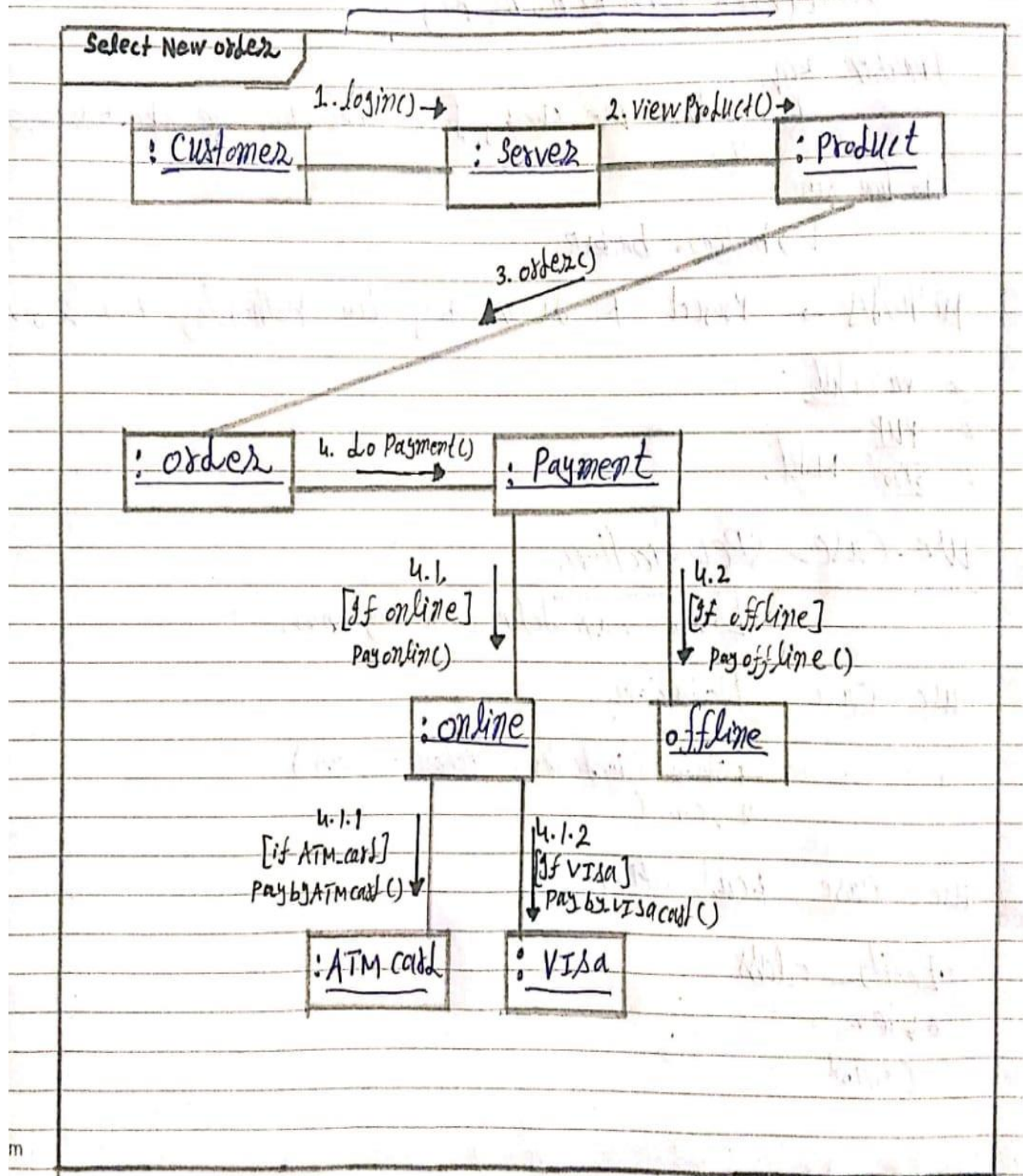
Activity Diagram  
Inventory Management  
System



## 5.8 COLLABORATION DIAGRAM

Name: Muhammad Ibraheem (9389)

### Collaboration Diagram



Collaboration diagram for the Select New order,  
(Inventory Management System)

## **5.9 GitHub Link**

<https://github.com/asifkasi/OOAD>

## **5.10 Trello Link**

<https://trello.com/c/srCFkVU2/1-project-inventorymanagementsystem-link>

## **5.11 Domain Link**

<http://www.smcom.somee.com>

### **5.11.1 login Access**

Email: admin

Password: 123