PAF-Karachi Institute of Economics & Technology

Department of Computer Science
Course Project Proposal Form

SOFTWARE REQUIREMENT SPECIFICATIONFOR ONLINE SHOPPING PORTAL.

Prepared by

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Proposedto

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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 ProductScope

- It is a small offline Inventory Managementsystem
- It is use only in oneshop
- In this software Secure Registration and profile managementfacilities for admin and users.
- Users after login only see Product Items and Quantity areavailable
- 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 theclient
- The scope of this system to allow the stock managementdepartments 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 friendlyscreens.
    - Complain mechanism, so that Users can give complain fortheproductorservicewhichtheyhavepurchased.

Also facility rating of individual products by relevant Users.

1.3 Acronyms andAbbreviations

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 SRSdocument.
- *Fundamentals of SoftwareEngineering*

1.5 Technologies to beused

- Programminglanguages:
- C#: C#.Net is a programming platform— part of the MVC 5 framework for developing and running distributed multi-tier architecture webapplication
- HTML, XML: Hyper Text Markup Language and ExtensiblemarkupLanguagearethepredominant

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 & DevelopmentEnvironment**
- Microsoft Visual Studio: Microsoft Visual Studio is a toolkit which is designed for the creation of complex projects, providing fully dynamic webapplication.

2. OverallDescription

- 2.1 ProductPerspective
- 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 basedplatform.

2.2 ProductFunctions

- 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 thenapproveorrejectthem.Theadministratoralso

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

- 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 Usercharacteristics

- The user should be familiar with the using of Computer related terminology like Transactionetc.
- The user should be familiar with theInternet.

2.4 Constraints

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

not implemented.

- No multilingualsupport
- All payment on cash not online

2.5 OperatingEnvironment

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. SpecificRequirements

3.1 FunctionalRequirements

1. Administrator:

- **Database Management:** Control the database and keep trackof all records of Users and employeedetails.
- **Contact and Giving Permission to Admin:** Contact with the admin and give permission to sell their product under the siteafter testing the product'squality.
- **View all details:** View the details of all employees and controlthe whole site.
- **Advertising the Site:** Responsible for making advertisementsfor thesite.

2. Users:

- **Login:** Users must have a valid login id to enter into thesite.

- **Registration:** New users can sign up by creating newID.

- **View and edit Own Details:** Can view/edit his personaldetails, payment details, and details about servicesprovided.

- **Choosing and comparing products:** Can view all available products and can compare them and make a choice forpurchasing products.

- **Purchasing:** Can purchase any product throughcash.

- **Giving Feedback to Users Care:** Can give feedback after logina feedback box show to Users than Users givefeedback.

- **Logout:** Users must logout of the site after purchasingproducts.

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 theprint.
5. It allows admin to generate stock detailsreport.
6. It allows admin to generate inwards detailsreport.
7. It allows admin to generate outwards detailsreport.

8. It allows admin to generate returns detailsreport.
9. It allows admin to generate stock statementreport.
10. It allows any user to logout when he wants tocome out from thesystem

3.2 Non-functional Requirements

3.2.1 PerformanceRequirements

- The system shall accommodate high number of itemsand Users without anyfault.
- Responses to view information shall take no longer than 5 secondsto appear on thescreen.

3.2.2 SafetyRequirements

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

3.2.3 SecurityRequirements

- System will use secured database
- Normal users can just read information but they cannot edit or modify anything except their personal and some otherinformation.
- System will have different types of users and every userhas accessconstraints.

3.2.4 Errorhandling

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 GBRAM.
2. 160 GB Hard DiskSpace.
3. Ethernetcard.

4. InterfacesRequirements

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

4.1 UserInterface

4.1.1 EmployeeInterface:

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 StockInterface:

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 AdministratorInterface:

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

(i) Admin
(ii) Normaluser

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 ReportingInterface:

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 DataEditing

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”. Usercan 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 CommunicationInterfaces

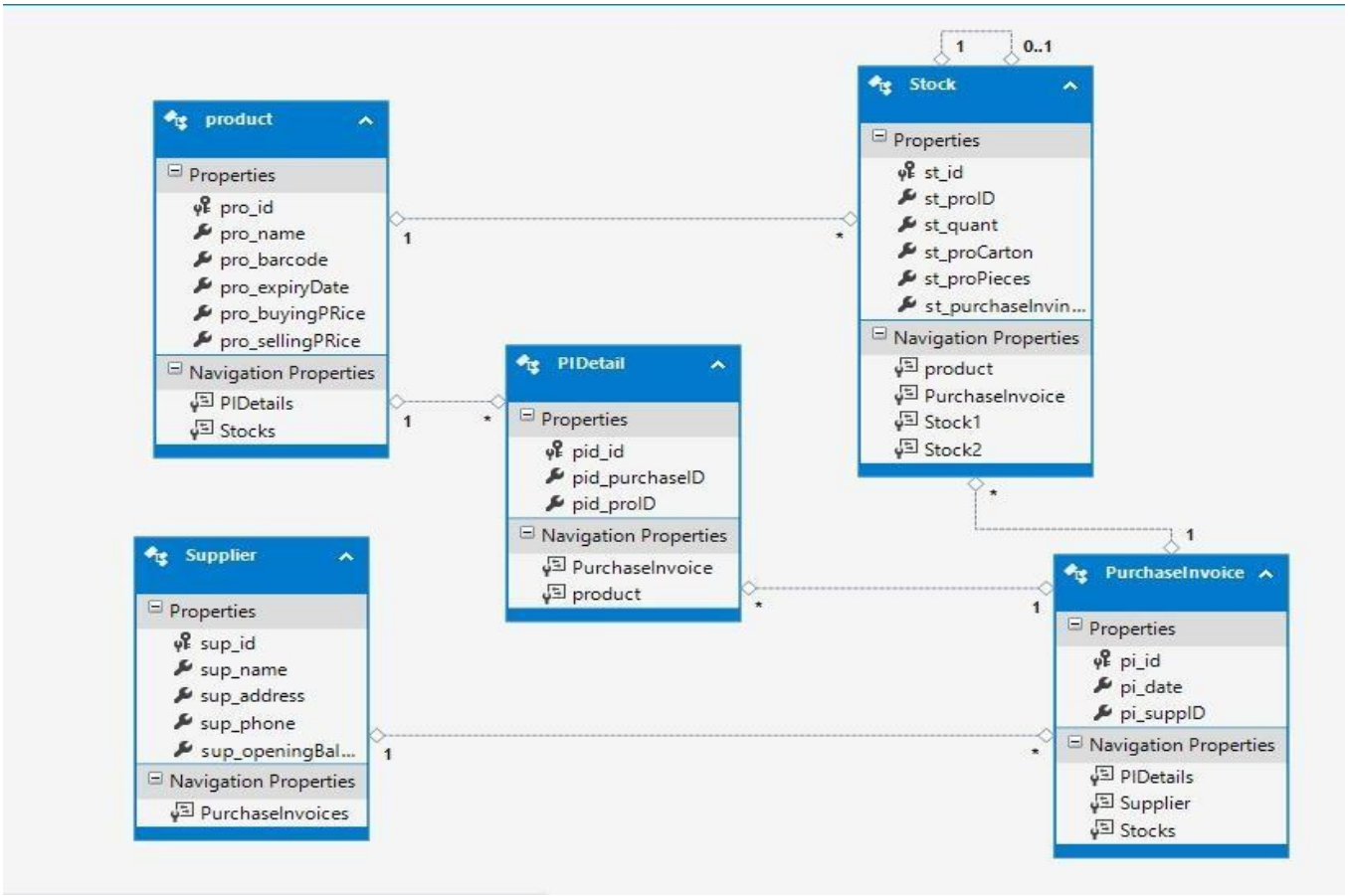
The system will use the communications resources provided by theIMS data centre. This includes, but is not limitedto

- 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.

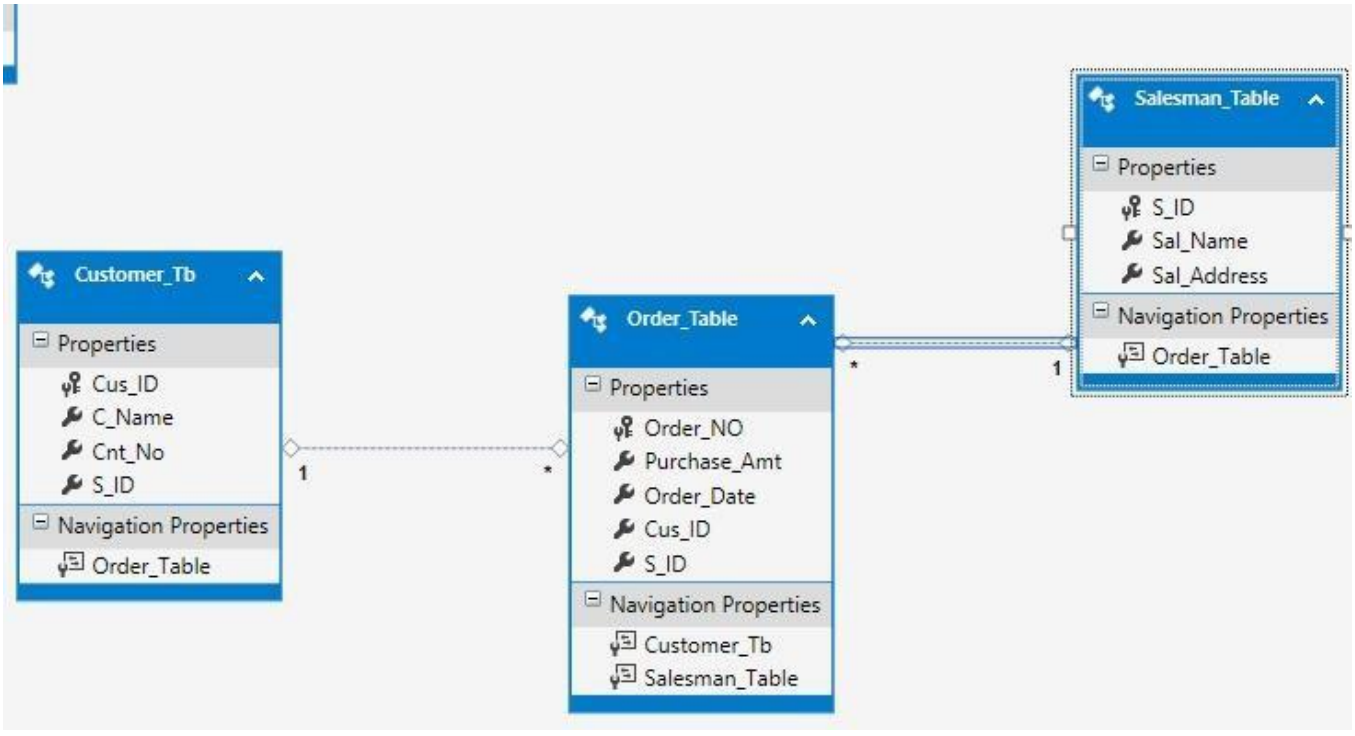
5. OtherThings

5.1 ERDDIAGRAM

5.1.1 Actual

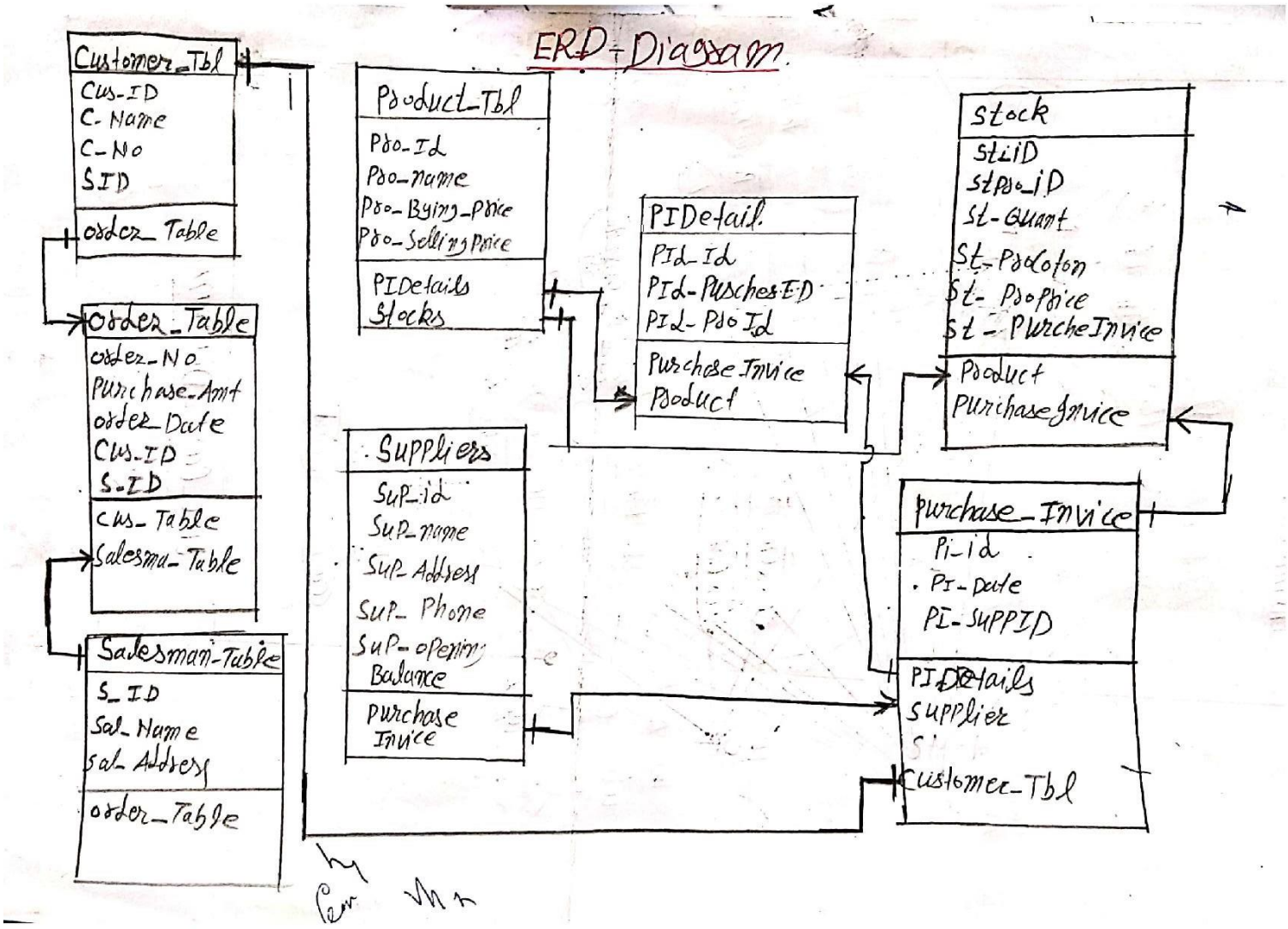


5.1.2 Enhanced

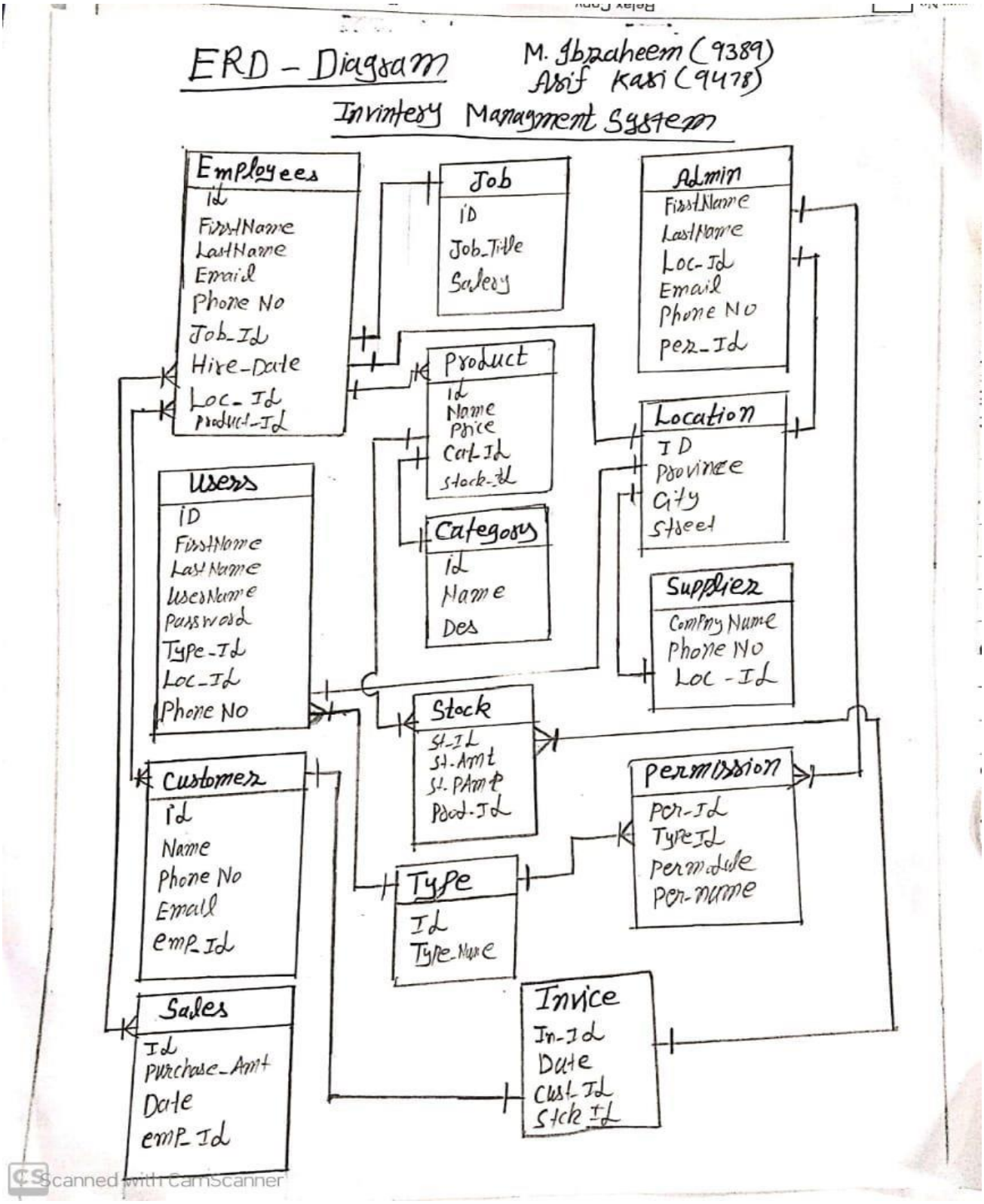


ERD

VERSION(1.0)



VERSION(1.1)



2. Use caseanalysis

IdentifiedActors

i Employee:

The employee can add, change and/or delete the information from the system.

ii Customer:

The customer can just view the available product and Quantity after loginin thesystem.

iii Supplier:

The Supplier can just view, the available stocksand update own profile.

iv Administrator:

The administratormaintains all the database and reports. He is responsible for changing the information of database and takes care of the payment and administrative reports.

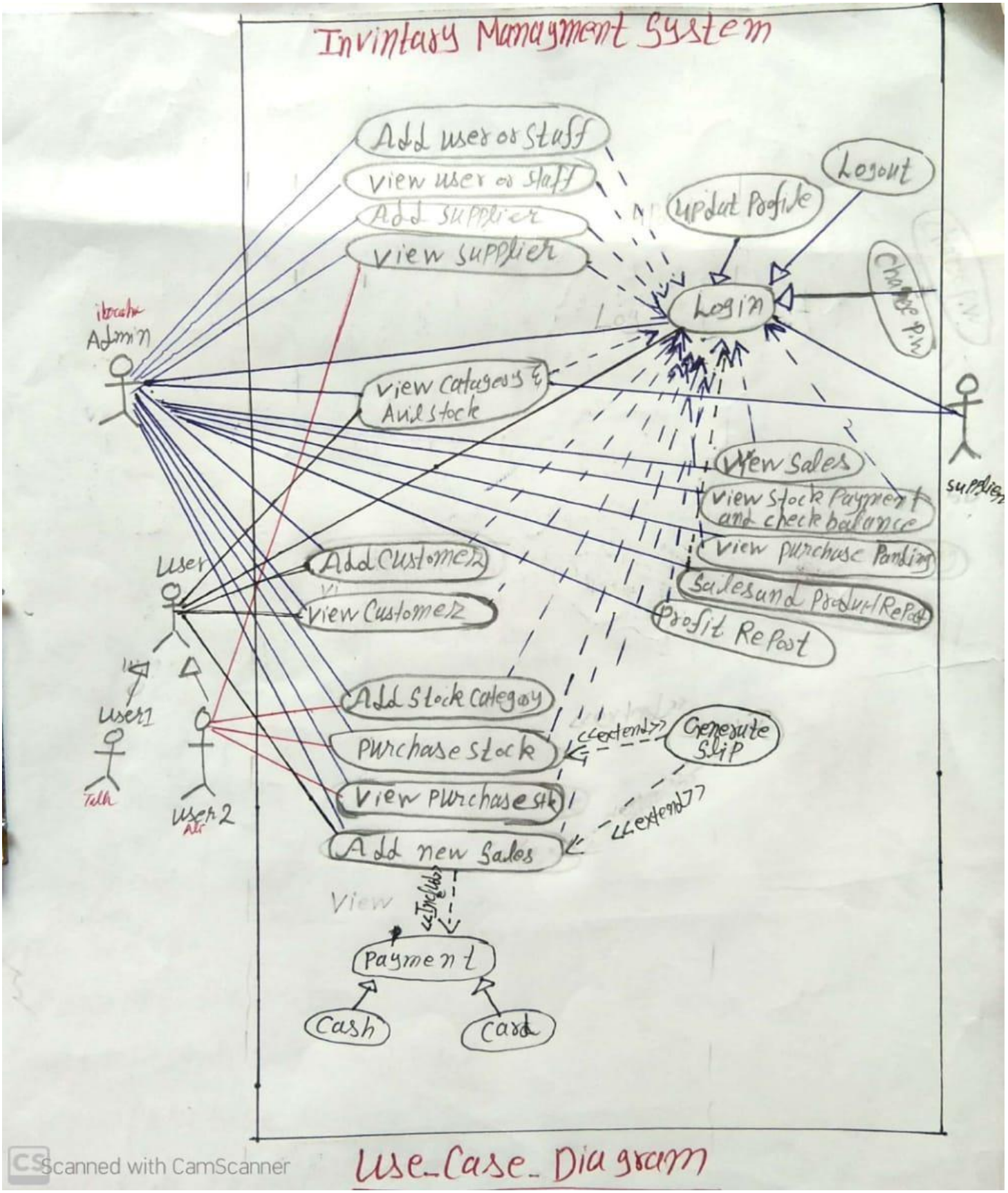
v Database:

The database is the collection of data where the data isstored andform where the data can beretrieved.

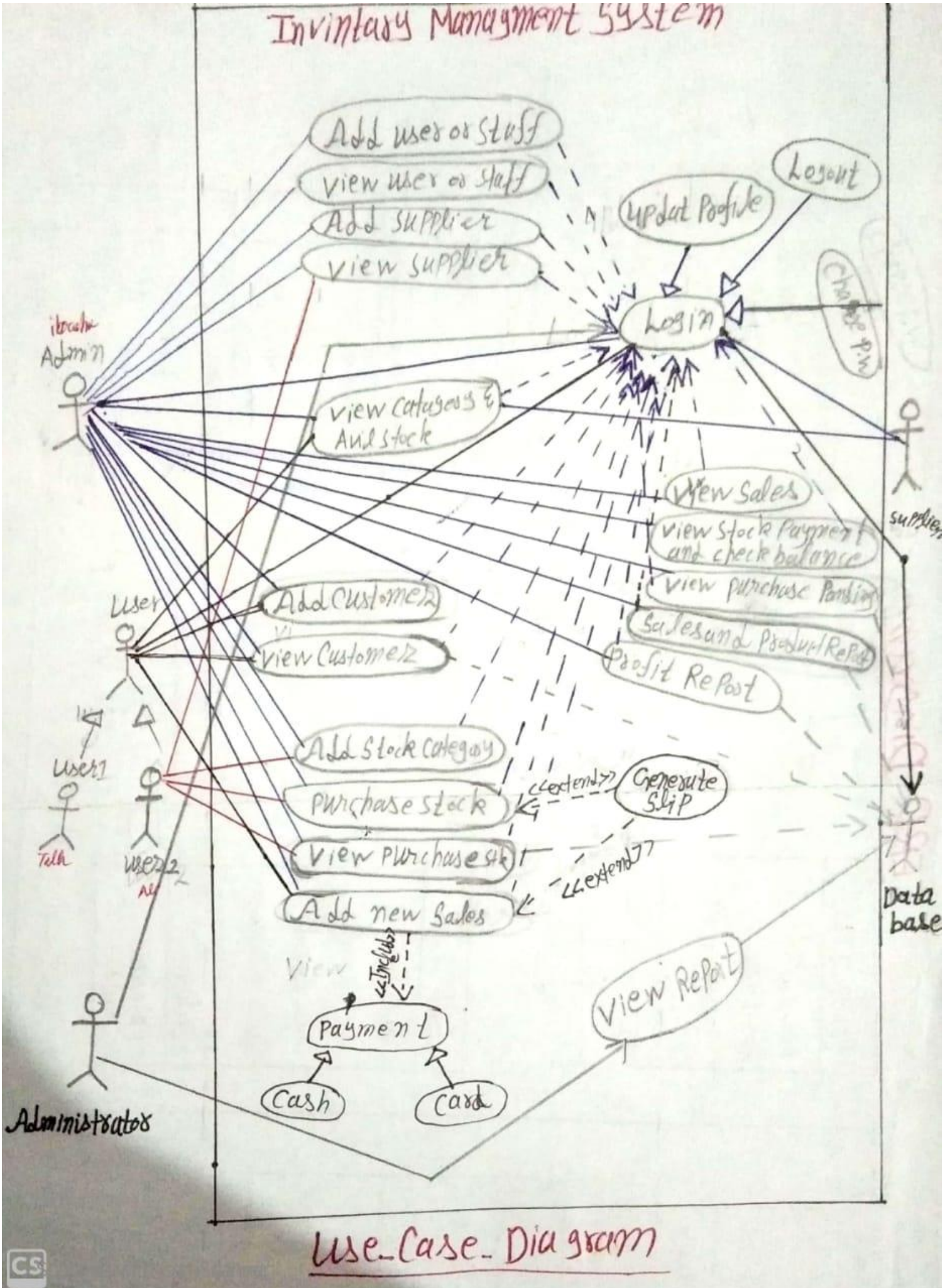
2.1 Identified usecases

Use Case Name	Use Case Description
Login	This use case allows to login into the system to access the relevant functions according to the user's role.The various user roles are employee, admin,customer,and administrator.
User Manage	This use case allows admin to manage user (employee,customer and supplier) and give permission to access the system according to their role.
Stock Manage	In this use case admin Manage all stocks Like Purchase,add,update,delete,view but supplier only view stock and remaning quantity.
Sells Product	This transaction performed by the Employee, and admin but Employee can add,update,delete sells information from the system.
View Report	It is a transaction performed by the administrator when he wishes to view report generated after all the stock Updete or sell updated.

1.1 USECASEDIAGRAM (Version 1.0)



USECASEDIAGRAM (Version 1.1)



USE-CASE Narrative

Inventory Management System

Author(s):*Muhammad Ibraheem* ***Date : 20-04-2020***

Version : 1.0

Use-Case Name:	Login	Use-Case Type IMS Requirement :□
Use-Case ID :	IMS-UC1	
Priority:	High	
Source:	Requirement –IMS-R1.00	
Primary Business Actor :	User	
Other Participating Actors:	None	
Other Interested Stakeholders:	• Customer- Interested in purchase products. • Supplier – Interested in stock management. • Admin - Interested in every program. • Administrator-Interested in print report activity. • Employee - Interested in sales activity.	
Description :	This use case allows to login into the system to access the relevant functions according to the user's role. The various user roles are employee, admin, customer, and administrator. To login to the system, all users have their unique id.The users have a maximum 3 attempts to login after which their account are locked and they will have to contact the system administrator to unlock their account upon successful login the system will display the relevant user's home page.	

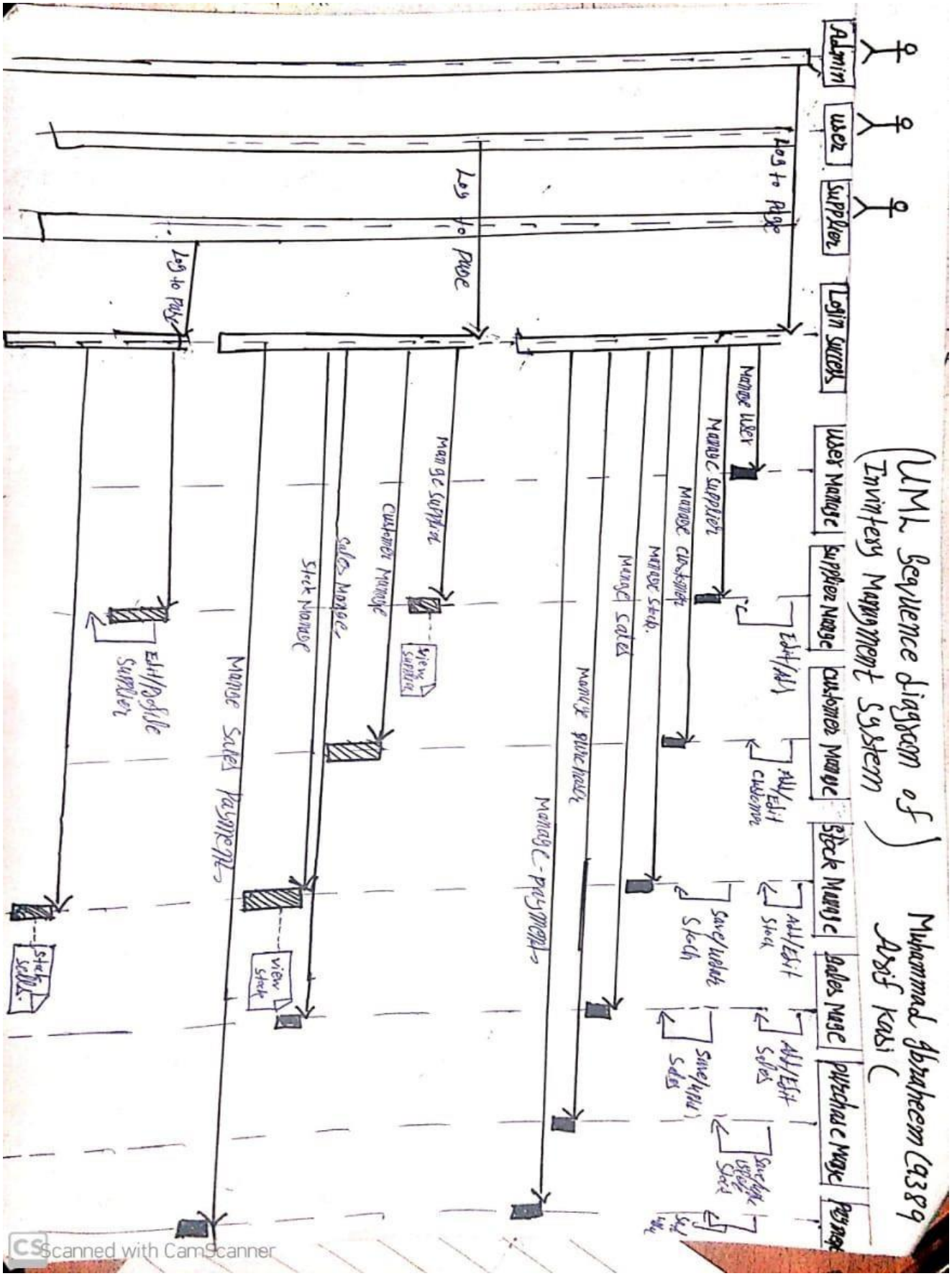
Inventory Management System

Author(s):*Muhammad Ibraheem* ***Date : 20-04-2020***

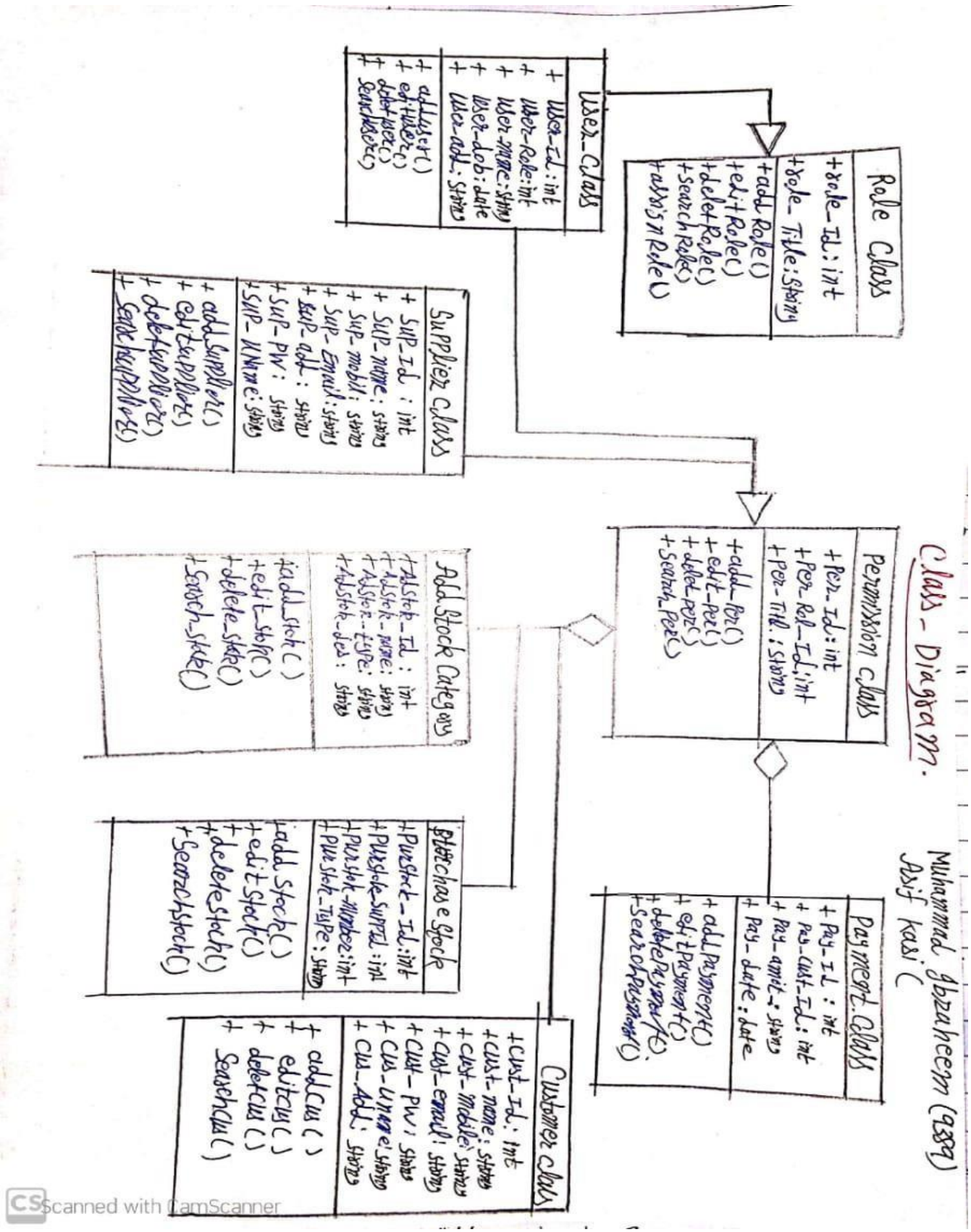
Version : 1.0

Use-Case Name:	Add new Order/Sale	Use-Case Type IMS Requirement :□
Use-Case ID :	IMS-UC2	
Priority:	High	
Source:	Requirement –IMS-R1.10	
Primary Business Actor :	User(Sales Assistance)	
Other Participating Actors:	None	
Other Interested Stakeholders:	• Customer- Interested in purchase products.. • Admin - Interested in every program. • Administrator-Interested in print report activity. • Employee - Interested in sales activity.	
Description :	This use case allows to transaction performed by the Employee, and admin but Employee can add, update, delete sells information from the system. To take order from customer and then sell products.	
Precondition	Sales assistance must login successfully Customer must have an account	
Trigger	This use case initiated when new order take by customer. System triggers retrieve customer details use case	
Basic Flow:	1. The sales assistance enter and submit product ID 2. The system validates product ID 3. The system retrieves and displays product details 4. The sales assistance enters and submits quantity 5. The system validate the quantity 6. Repeats step1 to step 4 for all products 7. The sales assistance conforms customer order 8. The system creates a new customer order 9. The use case ends	
Alternative Flow:	**1.Purchase Order notfound:** If in the change order or delete purchase order sub-flows, the purchase order with specified id number does not exist, the system displays an error message the manager can then enter a different number or cancel theoperation at which point the use caseends. **2. CancelDeleted:** If in the delete purchase order sub-flow the manager decides not to delete the purchase order, the delete is cancelled and basic flow isstarted at thebeginning.	
Conclusion	This use case concludes when order conformed.	
postCondition	The system creates a new customer order	

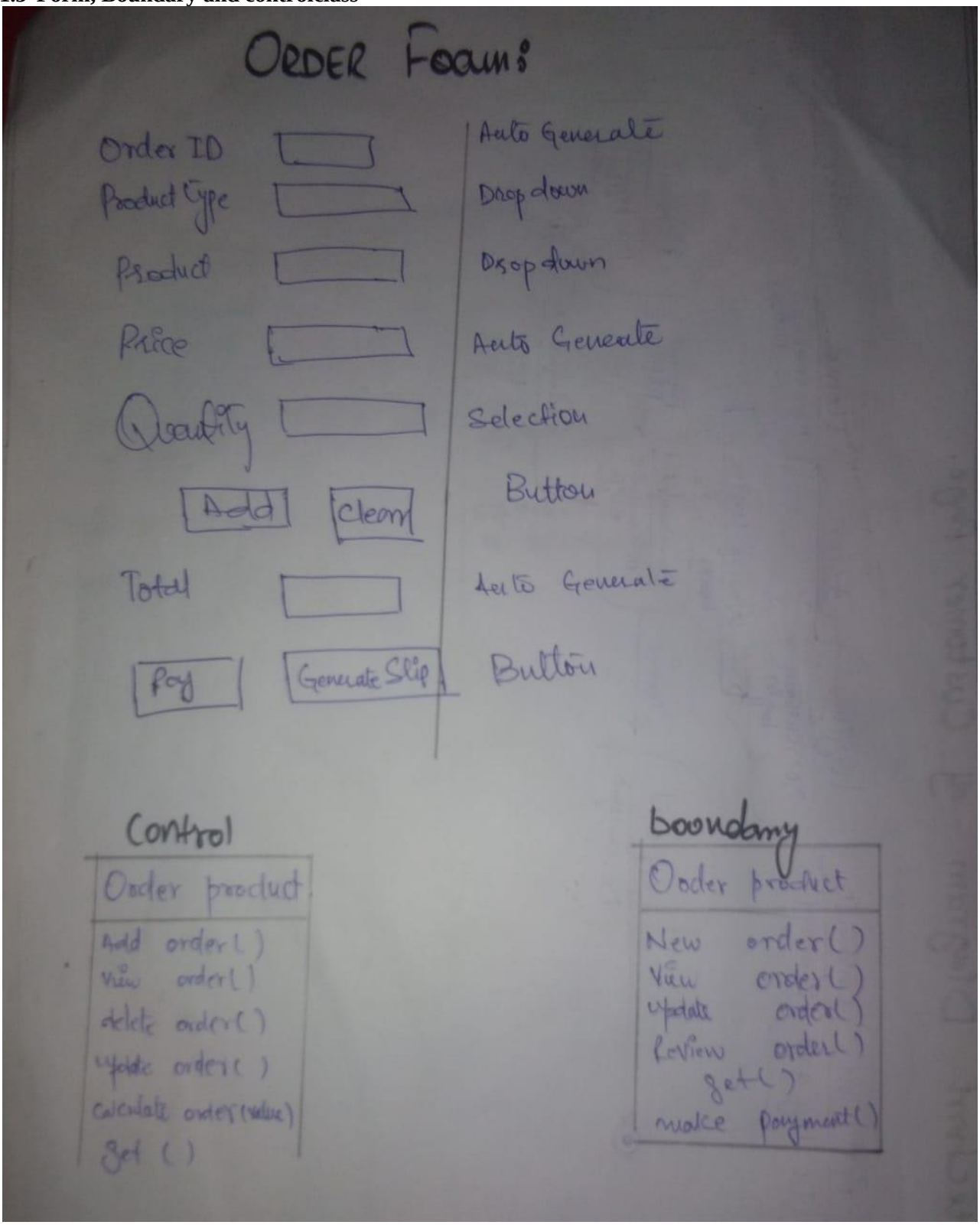
1.1 SEQUENCEDIAGRAM



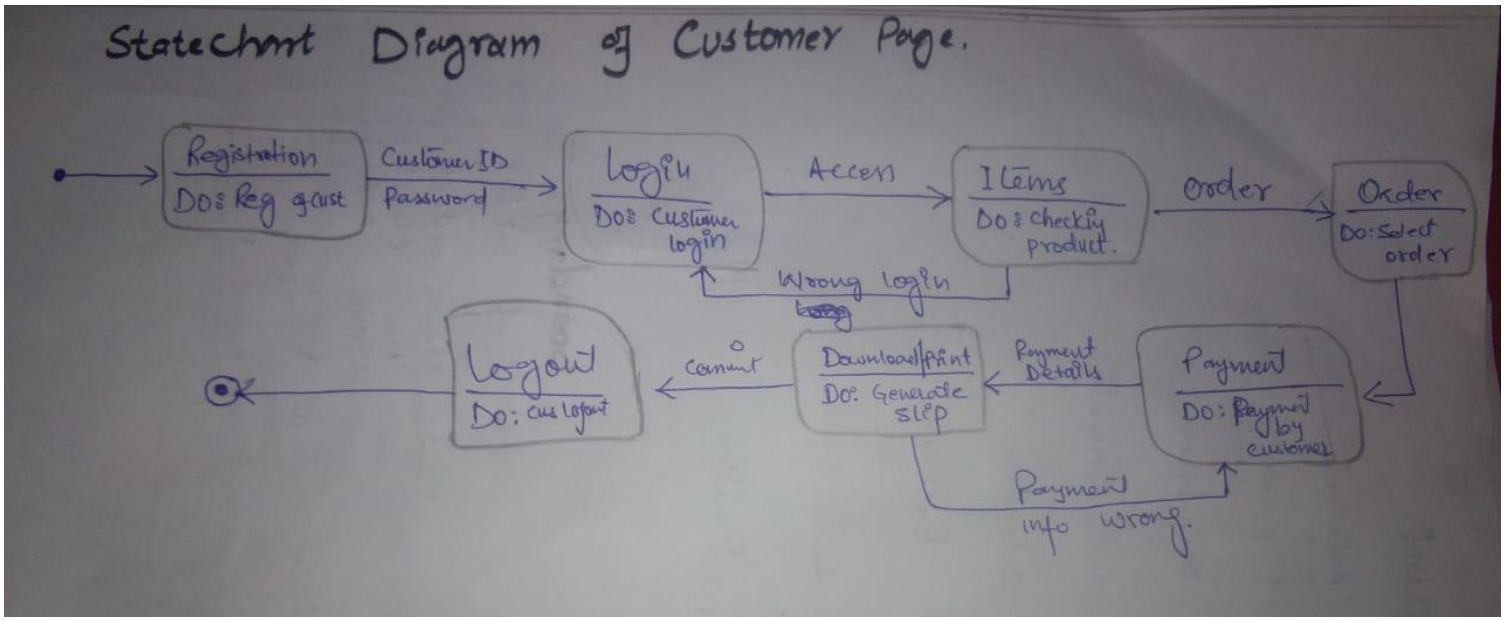
1.2 CLASSDIAGRAM



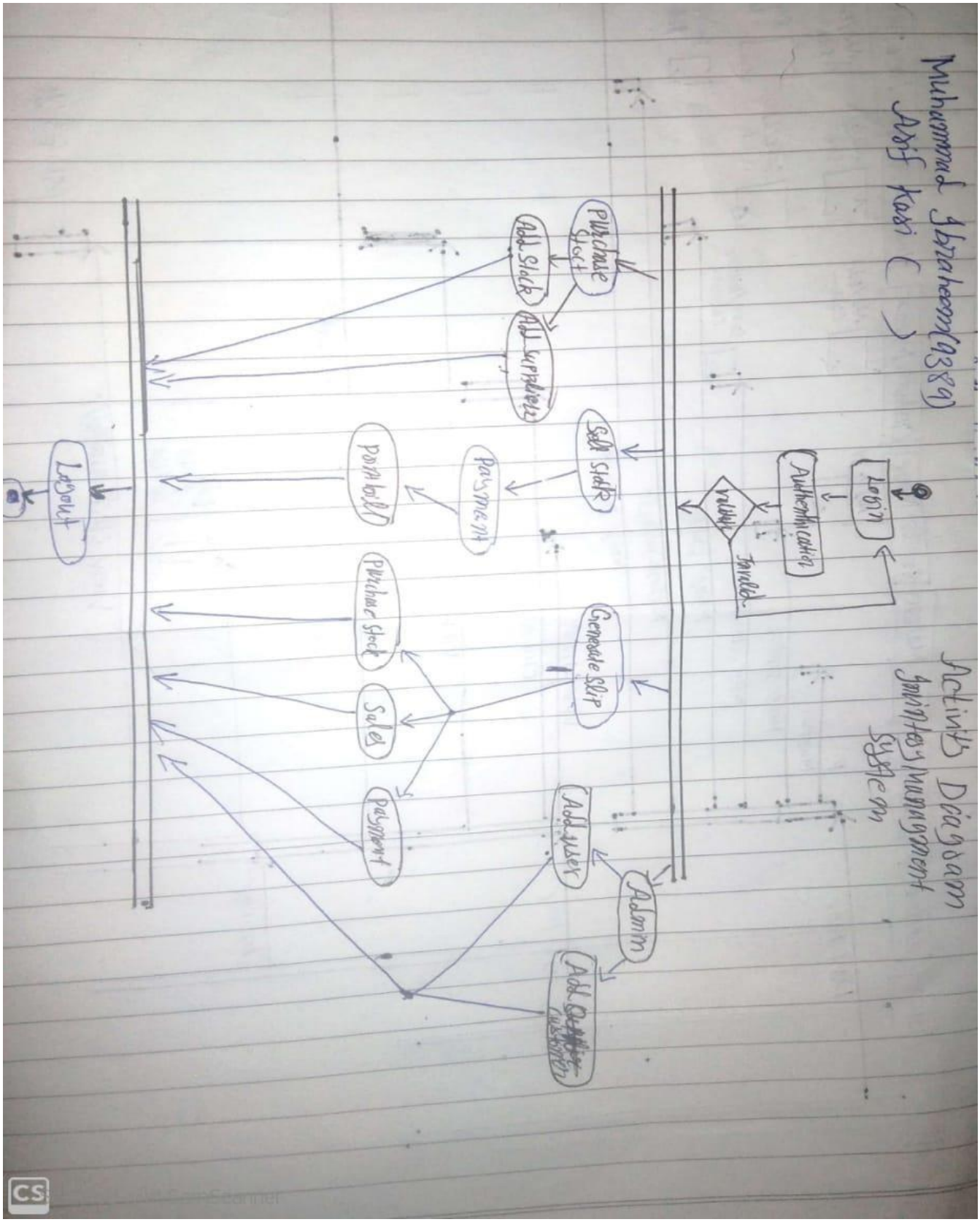
1.3 Form, Boundary and controlclass



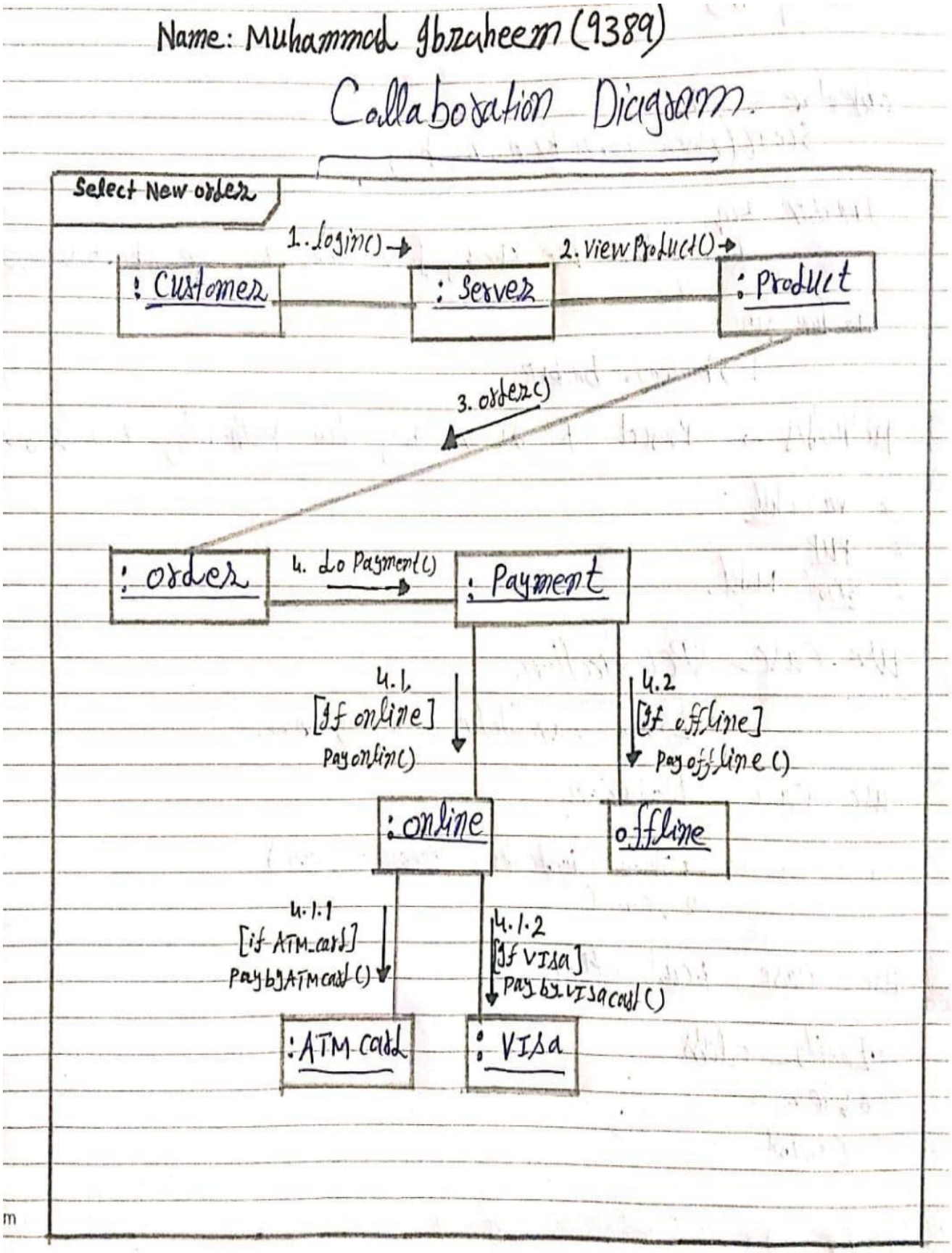
State chart diagram:



1.4 ACTIVITYDIAGRAM



1.5 COLLABORATIONDIAGRAM



Collaboration diagram for the Select New order.
(Invintory Managment system)

1.6 GitHubLink

https://github.com/asifkasi/OOAD

1.7 TrelloLink

https://trello.com/c/srCFkVU2/1-project-invinterymanagmentsystem-link

1.8 DomainLink

http://www.smcom.somee.com

1.8.1 loginAccess

login ID: admin

Password:
123