

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“JnanaSangama”, Belgaum -590014, Karnataka.



LAB REPORT on

Object-Oriented Modeling and Design

Submitted by

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in partial fulfillment for the award of the degree of
BACHELOR OF ENGINEERING
in
COMPUTER SCIENCE AND ENGINEERING



B.M.S. COLLEGE OF ENGINEERING

(Autonomous Institution under VTU)

BENGALURU-560019

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B. M. S. College of Engineering,
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(Affiliated To Visvesvaraya Technological University, Belgaum)
Department of Computer Science and Engineering



CERTIFICATE

This is to certify that the Lab work entitled “LAB COURSE **Object-Oriented Modeling and Design**” carried out by **S Skanda (1BM19CS137)**, who is bonafide student of **B. M. S. College of Engineering**. It is in partial fulfillment for the award of **Bachelor of Engineering in Computer Science and Engineering** of the Visvesvaraya Technological University, Belgaum during the year 2022. The Lab report has been approved as it satisfies the academic requirements in respect of **Object-Oriented Modeling and Design - (20CS6PCOMD)** work prescribed for the said degree.

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Index Sheet

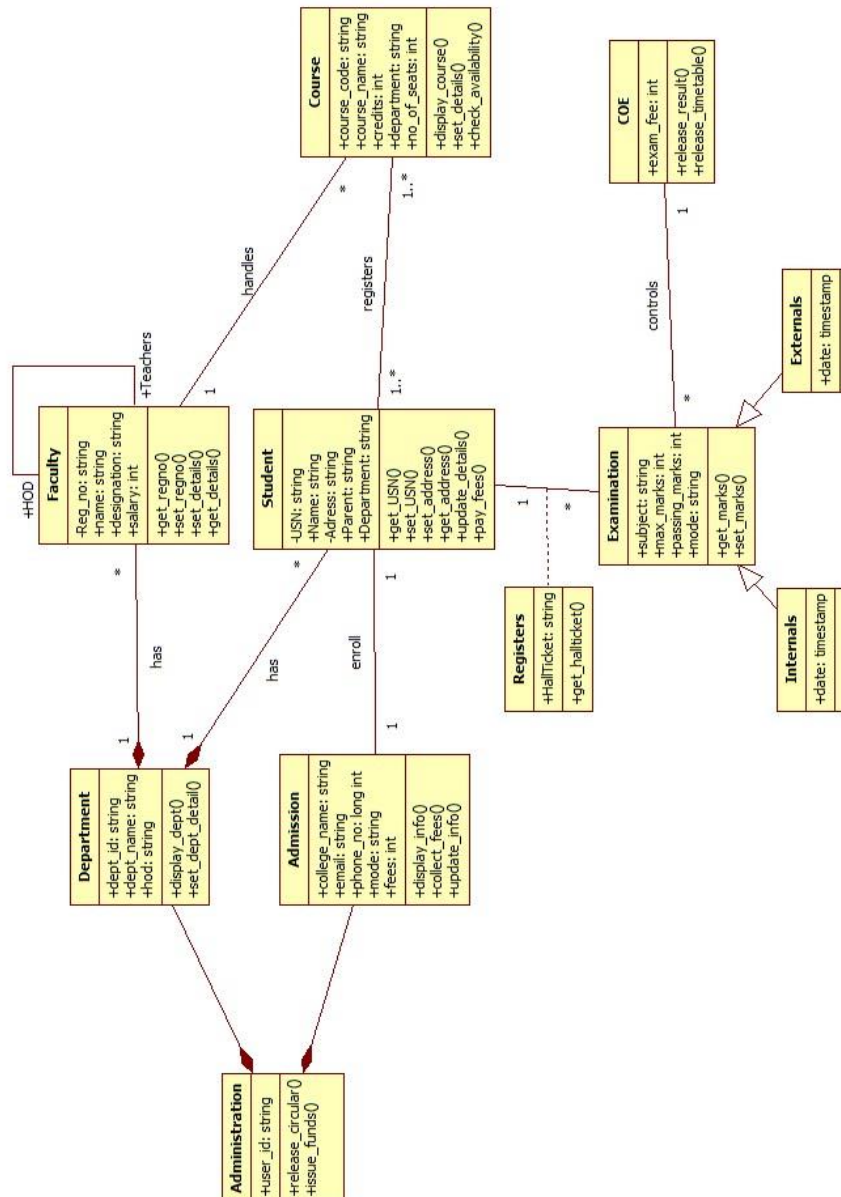
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1. College Information System

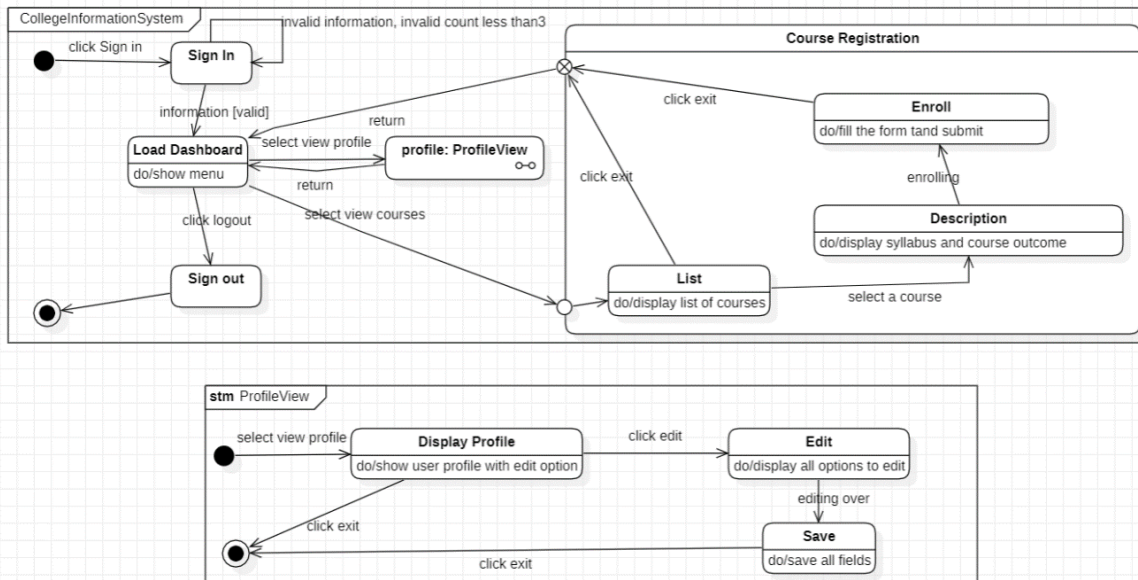
1.1 Problem Statement

The College Information System is a system that maintains student, staff and department information. It maintains the courses taught by teachers and students enrolled in them. Admission records of student and Examination details and other important information related to college management is maintained.

1.2 Class Diagram



1.3 State Diagram

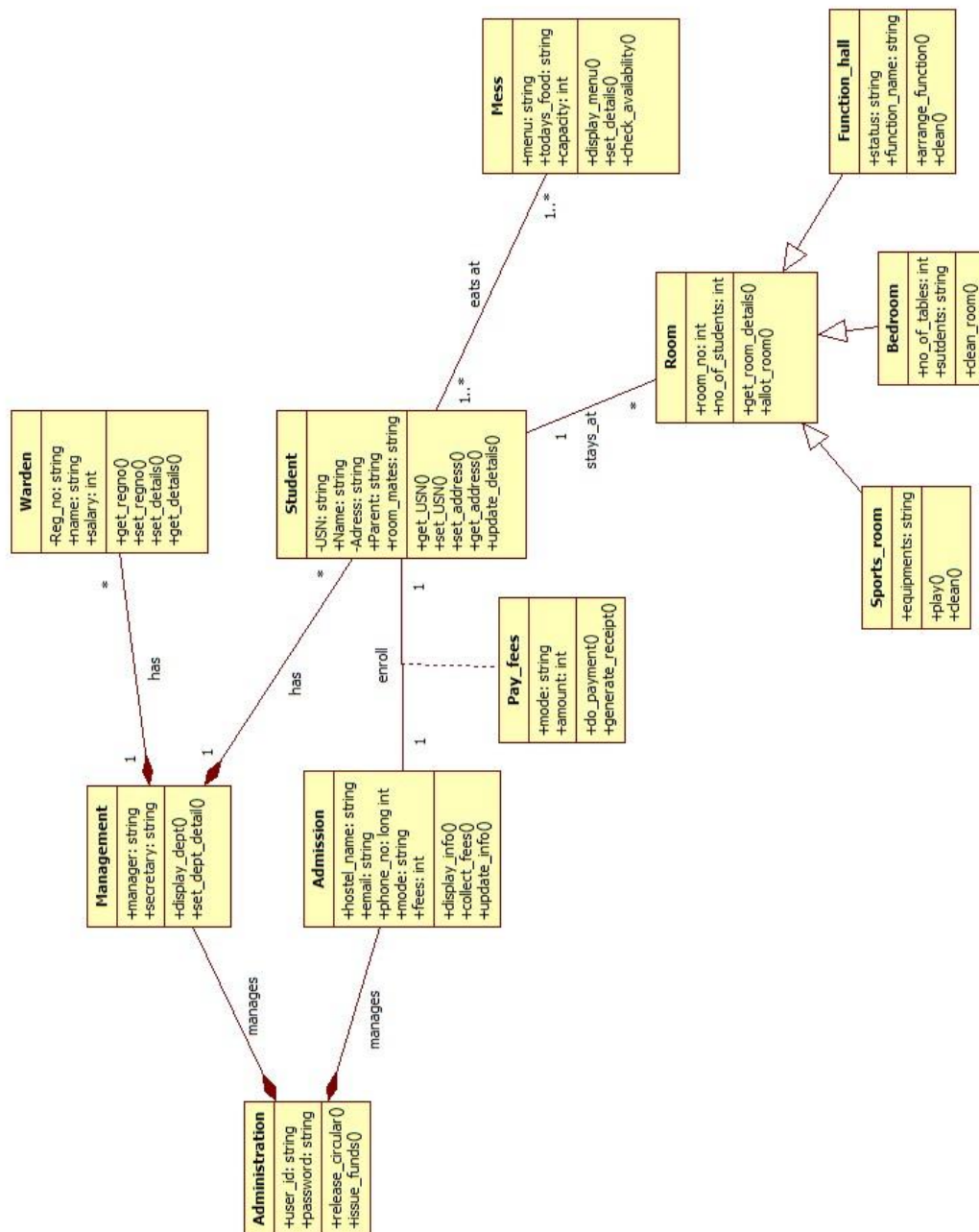


2. Hostel Management System

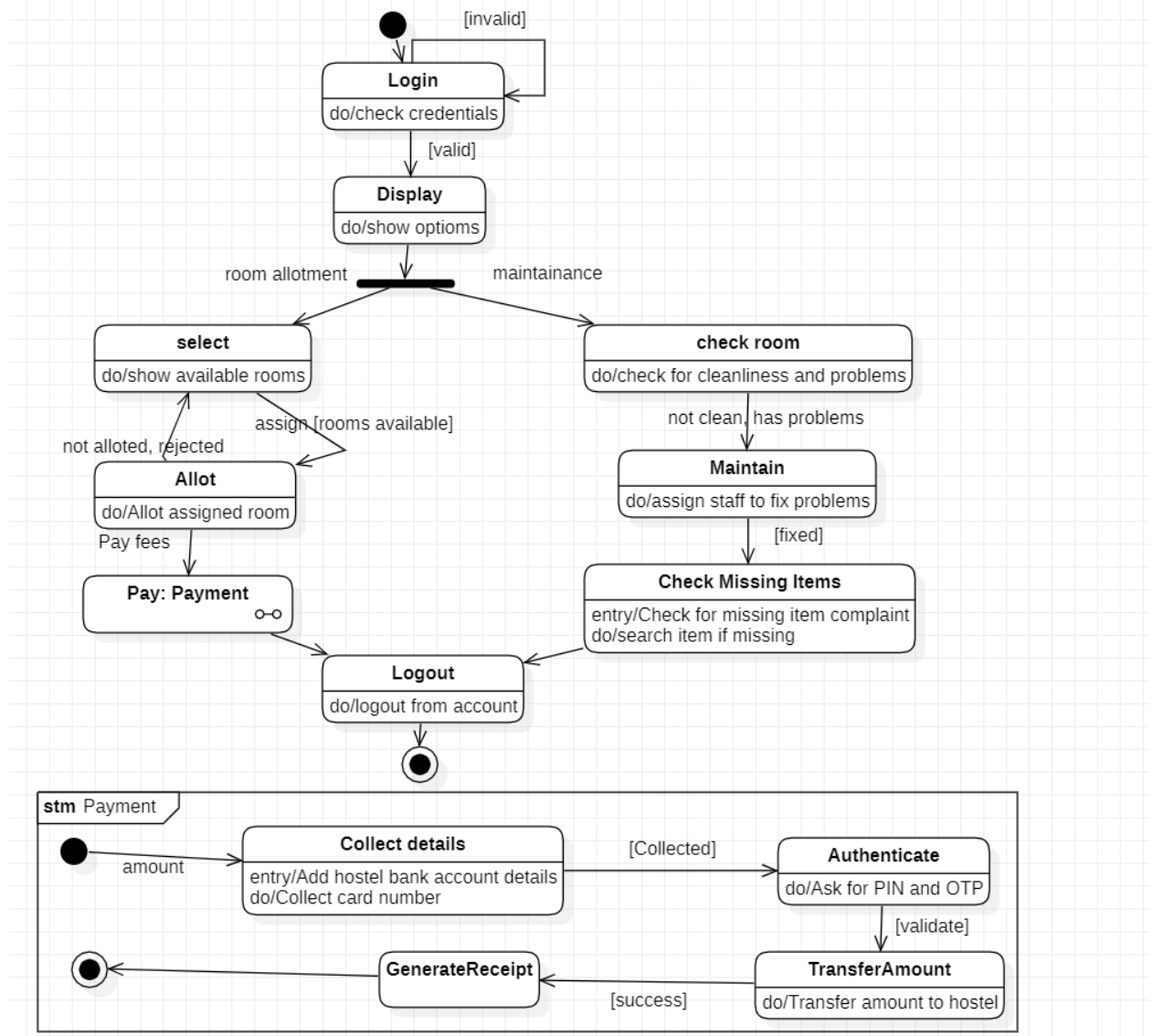
2.1 Problem Statement

The hostel management system is to provide college students accommodation to the university hostel more efficiently. This project also keeps details of the hostellers and applied students. It is headed by Warden. He will be the administrator. This document is intended to minimize human works and make hostel allocation an easier job for students and hostel authorities by providing online application for hostel.

2.2 Class Diagram



2.3 State Diagram

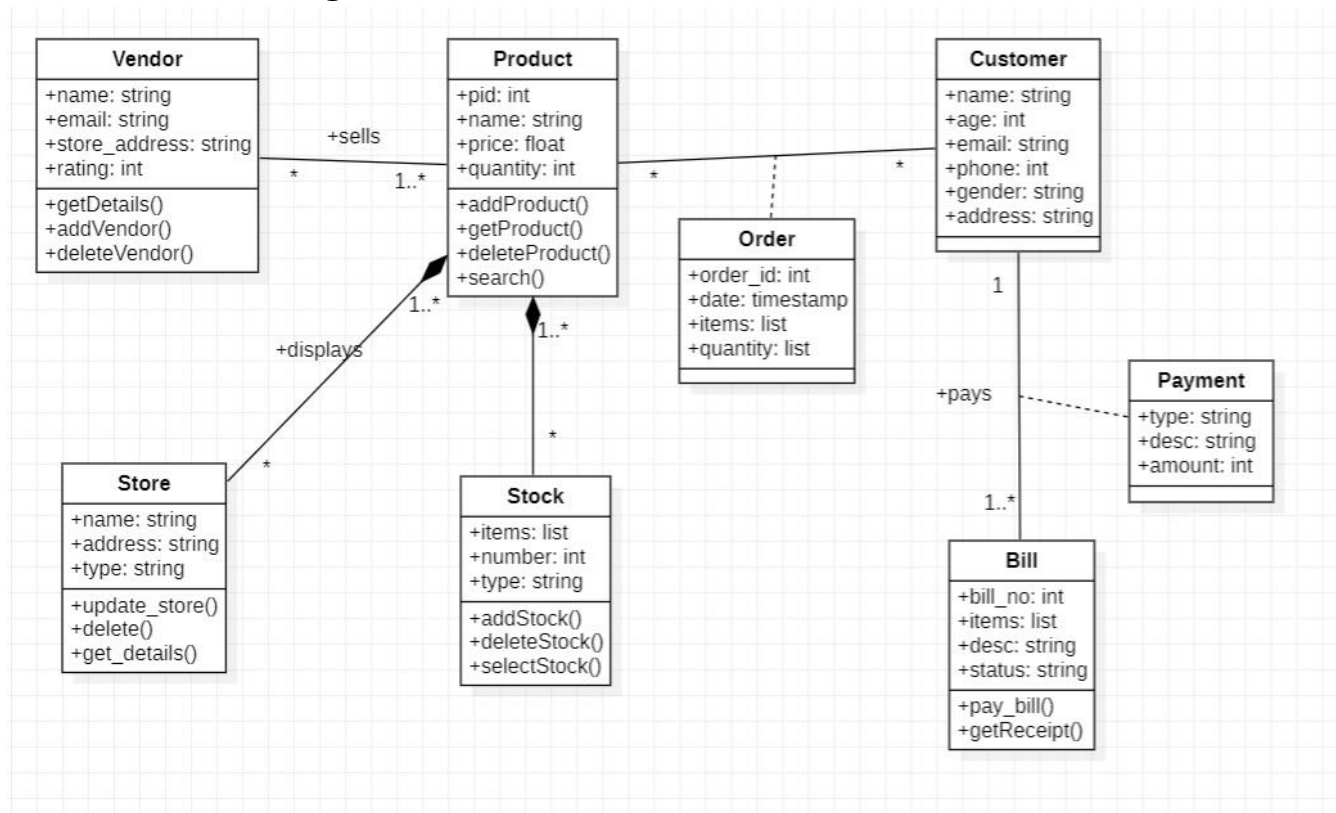


3. Stock Maintenance System

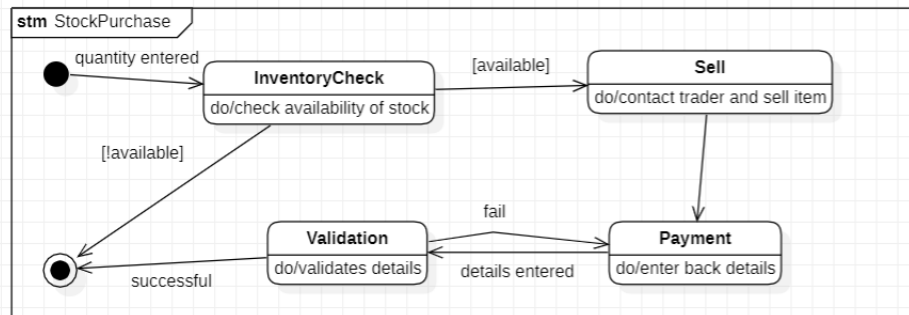
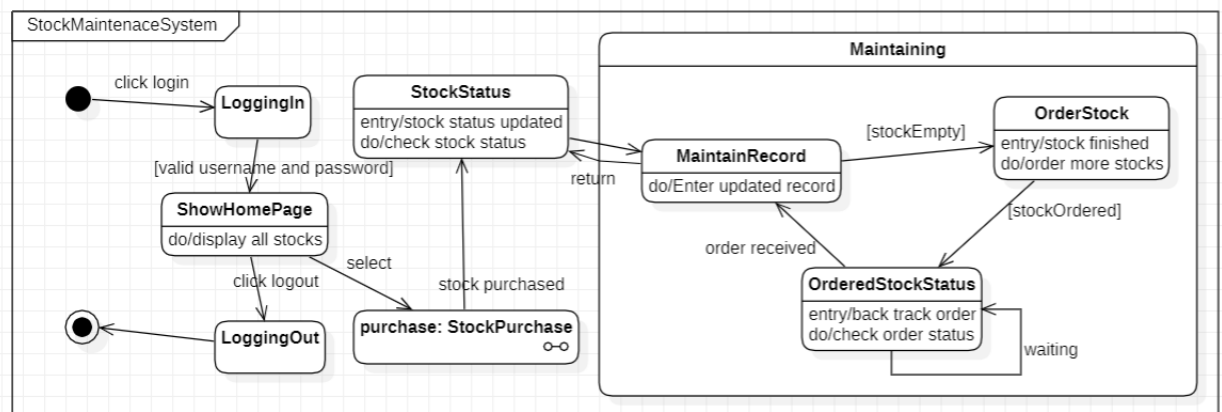
3.1 Problem Statement

The stock maintenance system is basically for the customers who access the information about the stock and retrieves the information. The stock maintenance system is to replace the existing maintenance system which is in efficient. The new stock maintenance system will allow the employee to record information of the products available in the store .The vendor deals with the information about the details of the suppliers giving product to the organization.

3.2 Class Diagram



3.3 State Diagram

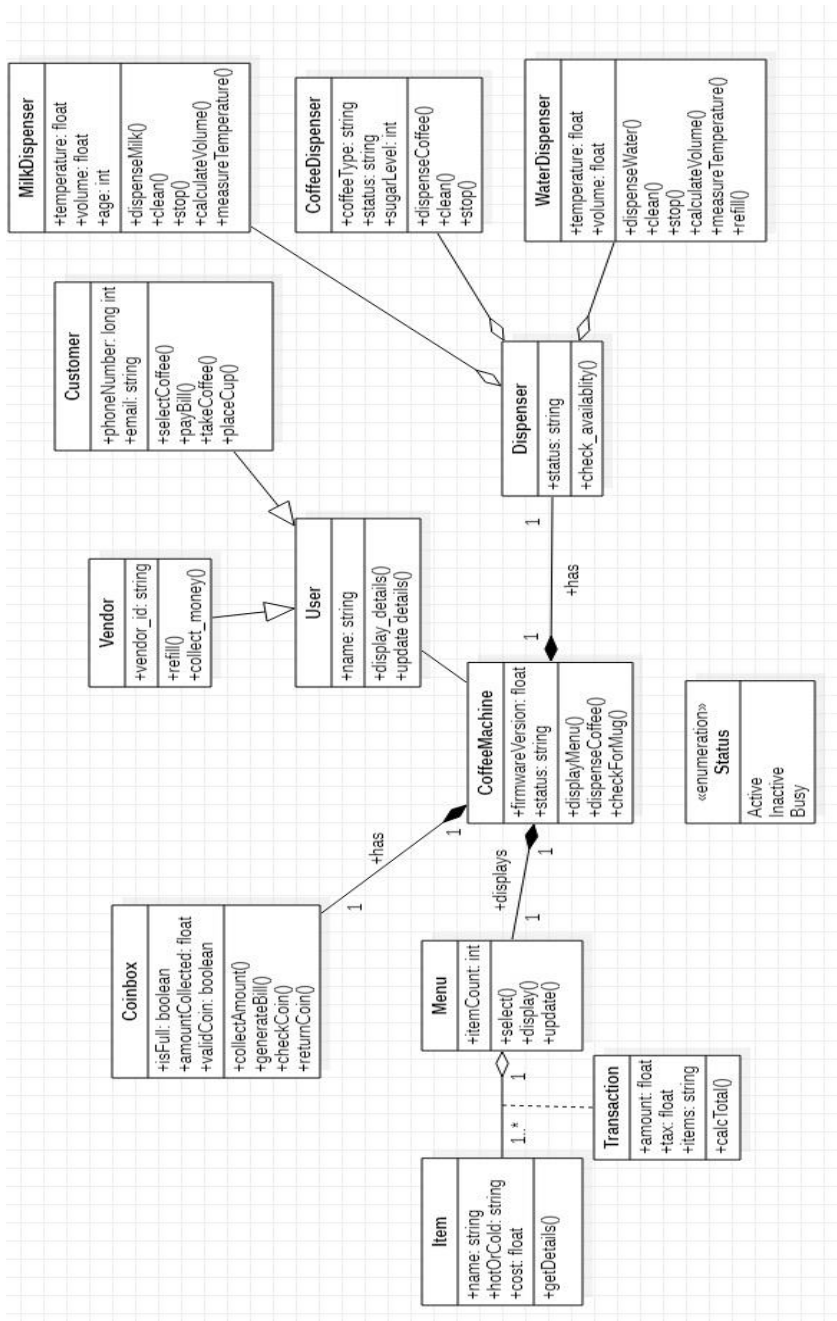


4. Coffee Vending Machine

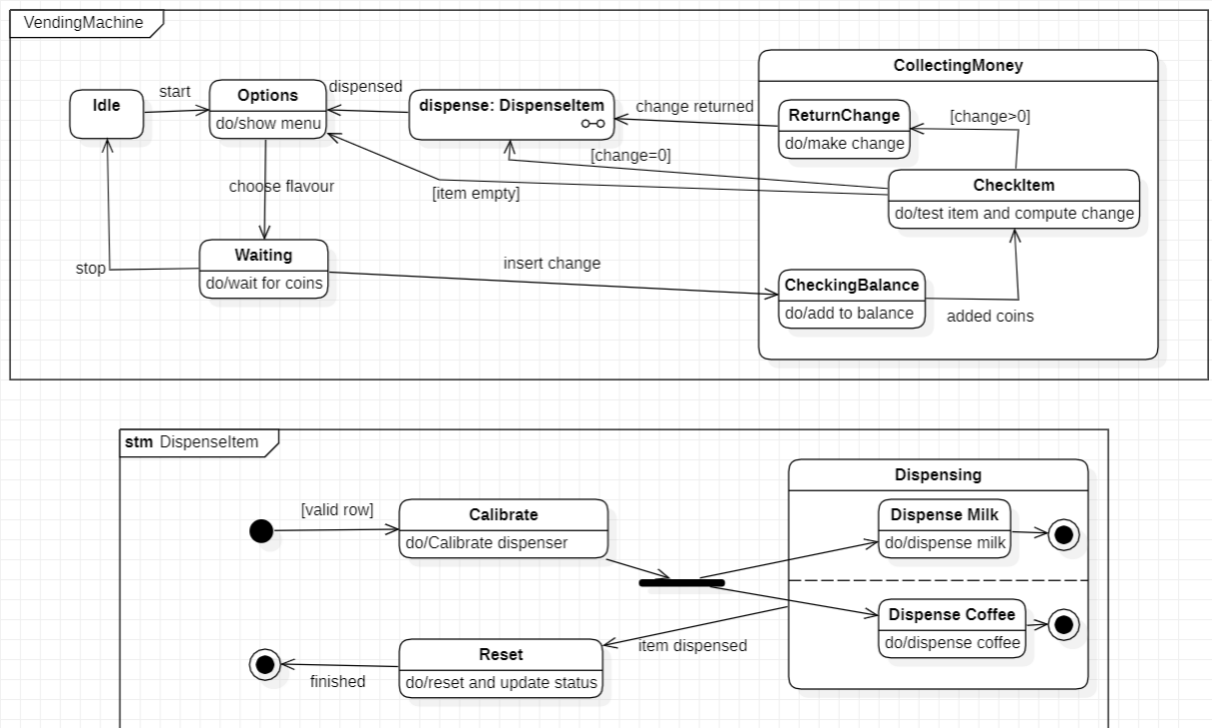
4.1 Problem Statement

The coffee vending machine is basically for the customers to buy coffee by themselves without any third person being involved. A coffee vending machine sells different types of coffee such. Each type of coffee has a price and a name. A customer can buy their choice of coffee by selecting the button of their coffee and paying for the same through the coin box.

4.2 Class Diagram



4.3 State Diagram

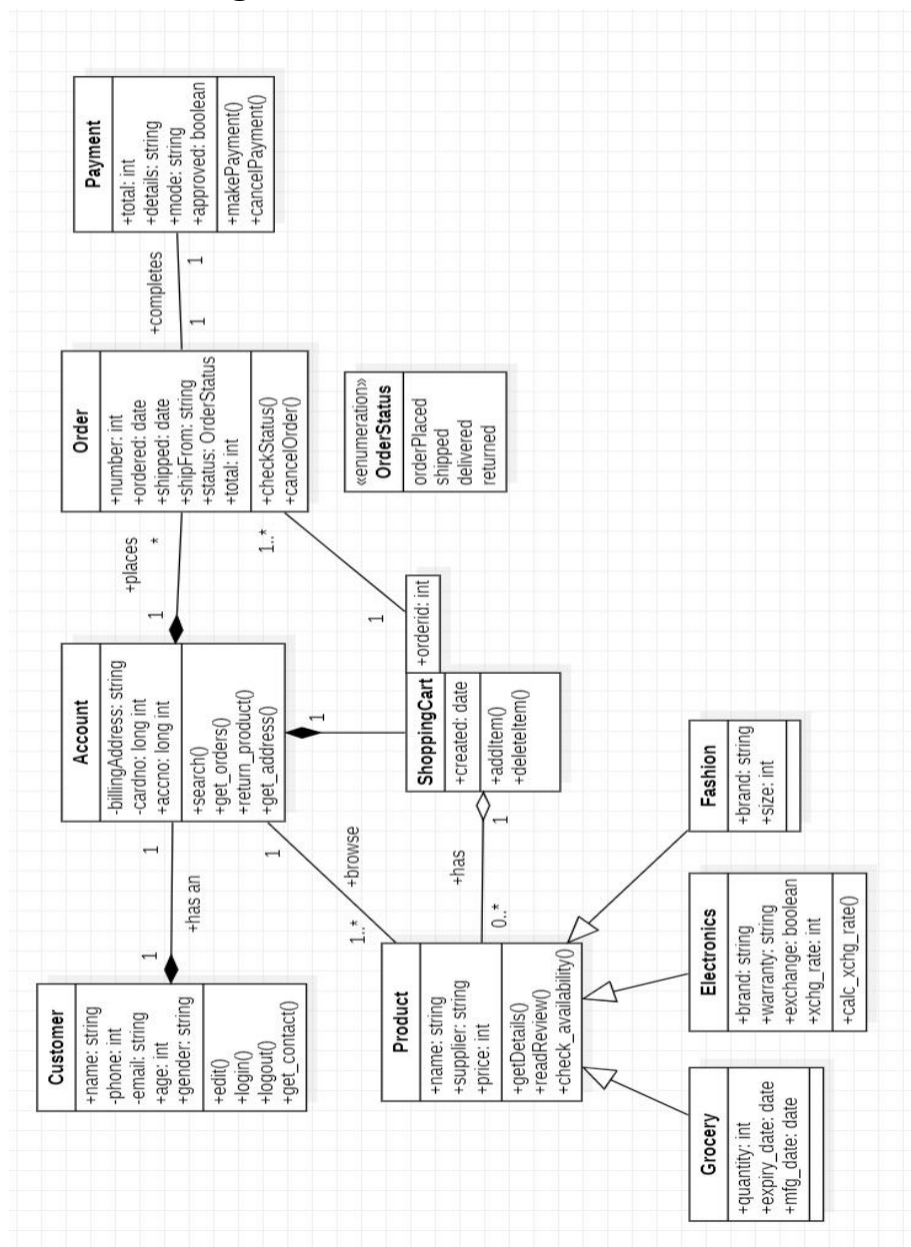


5. Online Shopping System

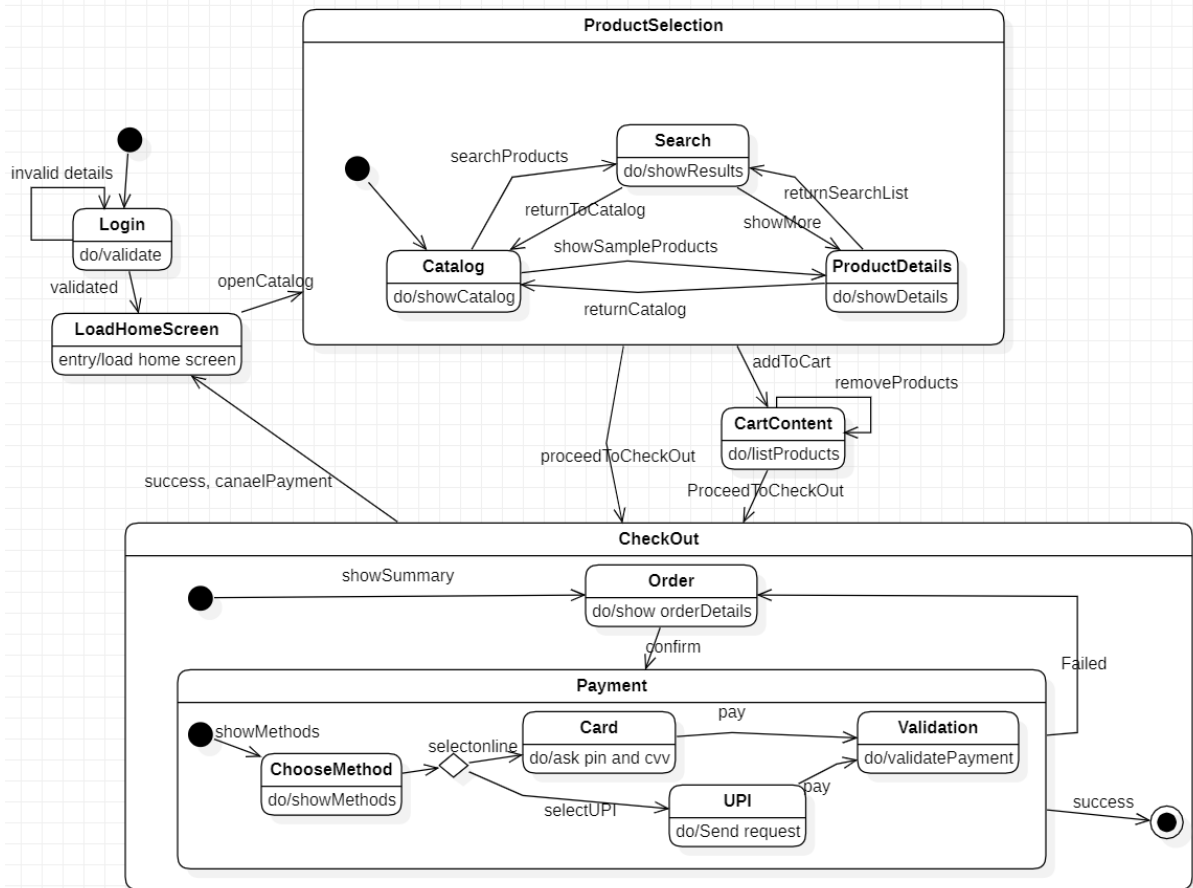
5.1 Problem Statement

The Online Shopping System for all kind of products web application is intended to provide complete solutions for vendors as well as customers through a single get way using the internet. It will enable vendors to setup online shops, customer to browse through the shop and purchase them online without having to visit the shop physically. The administration module will enable a system administrator to approve and reject requests for new shops and maintain various lists of shop category. This system allows the customer's to maintain their cart for add or remove the product over the internet.

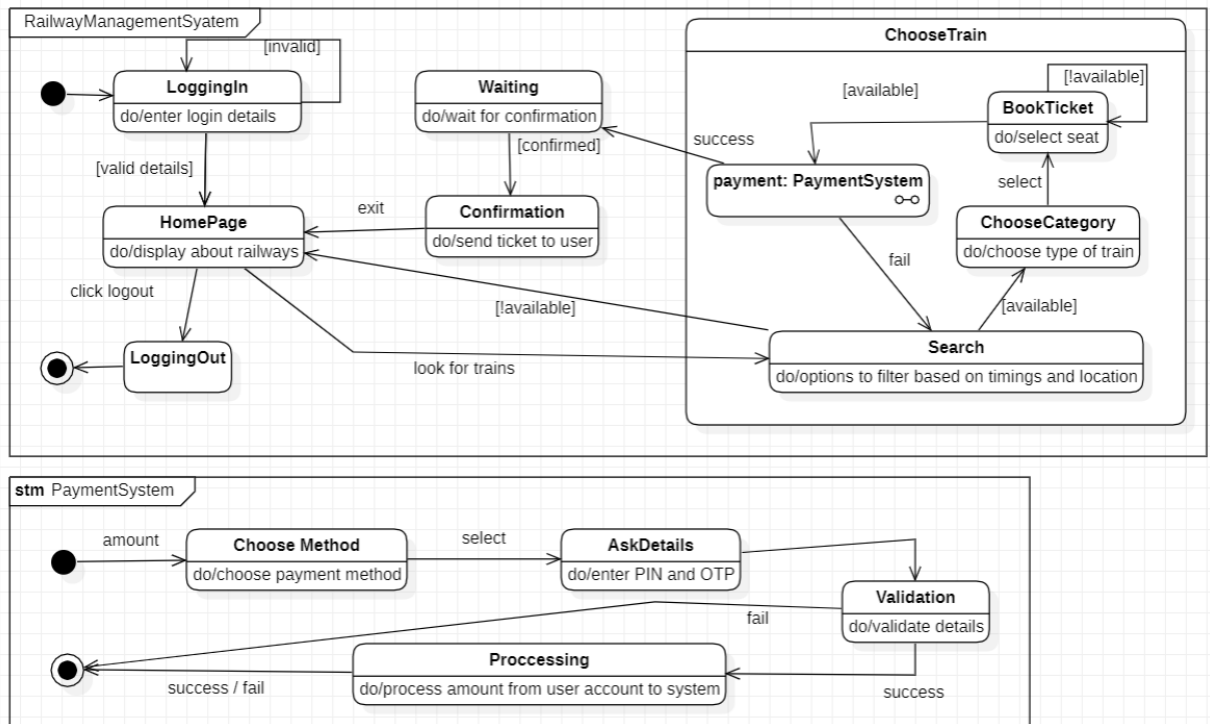
5.2 Class Diagram



5.3 State Diagram



6.3 State Diagram

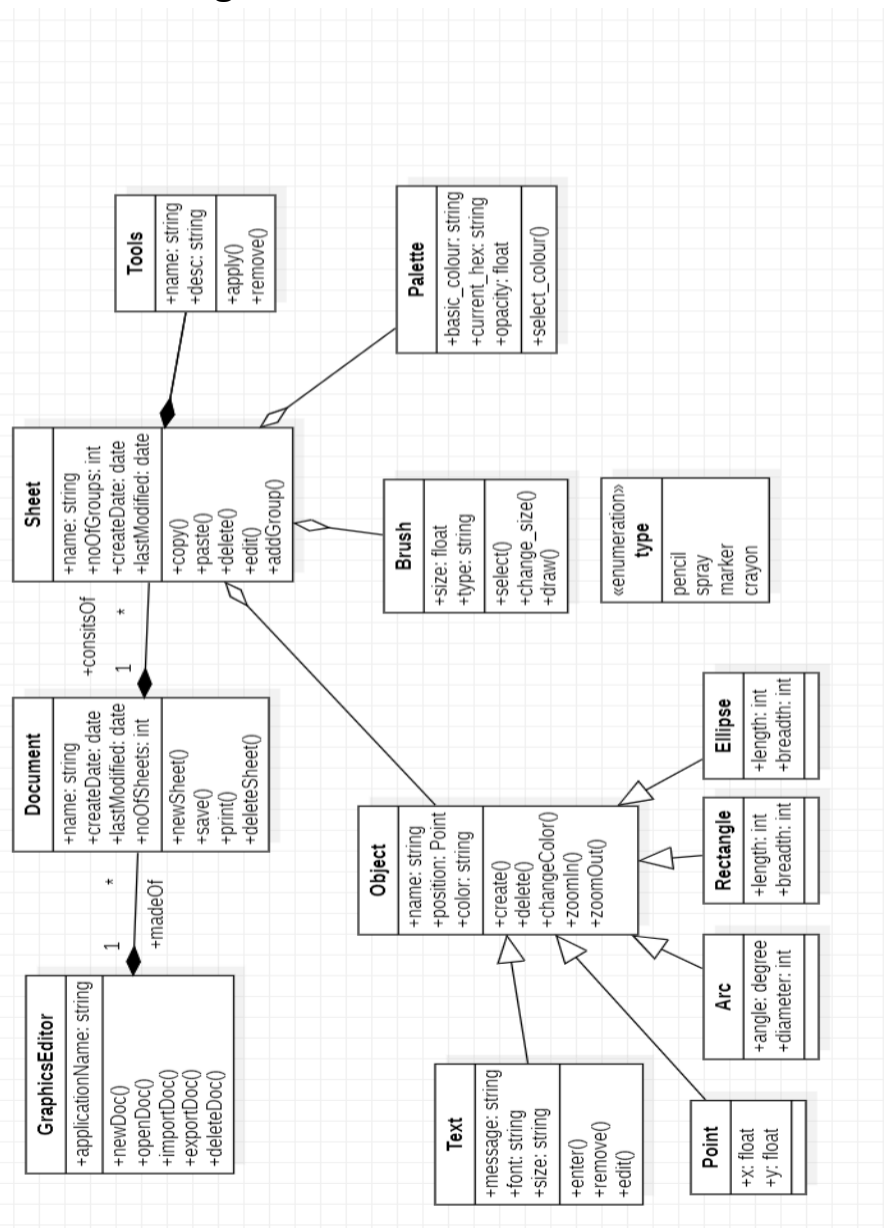


7. Graphics Editor

7.1 Problem Statement

The graphics editor provides an Application Programmer's Interface that enables a programmer to develop their own graphical model editor for a specific type of model. This API in turn, provides an environment in which the editor functions, and the programmer can create a graphical editor and palette of shapes in order to modify an underlying model. The graphical editor provides an interface with which the programmer implements said editor for a given underlying model. Such instance of the graphical editor allows a user to drag objects from a specified model into a working graphical diagram.

7.2 Class Diagram



7.3 State Diagram

