ORCHID INTERNATIONAL College

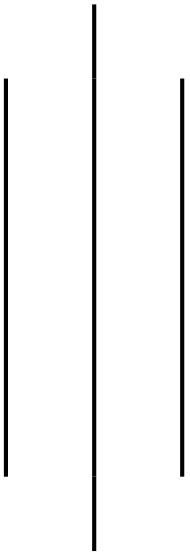
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 1

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 14th July, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

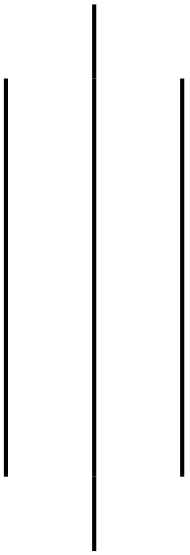
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 2

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 21st July, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

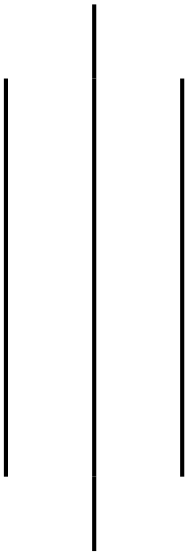
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 3

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 28th July, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

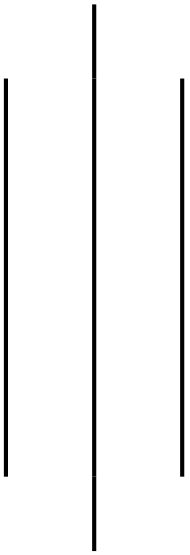
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 4

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 6th August, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

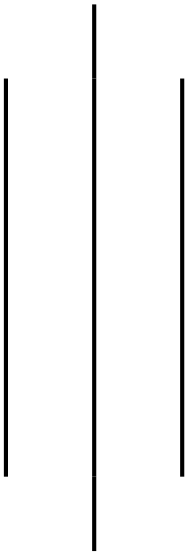
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 5

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 13th August, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

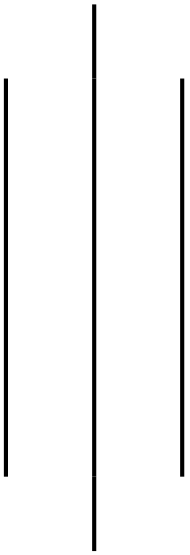
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 6

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 20th August, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

ORCHID INTERNATIONAL College

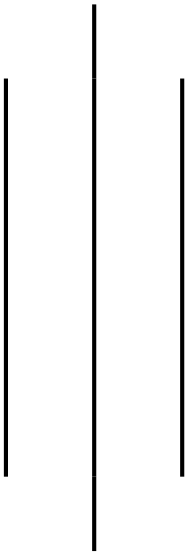
(Affiliated to Tribhuvan University)

A

Lab Report

on

Software Engineering



Lab Report No. 7

Submitted by:

Name: Rakesh Bhatt

Batch: 2073

Year: III **Semester:** VI

Submission Date: 27th August, 2019

Submitted to:

Faculty Name: Bijay Mishra

Subject: IT224: Software Engineering

Signature of Faculty:

A report on state diagram

A state diagram is a UML technique for designing the object oriented based system. This diagram shows the system behavior that keeps on changing dynamically while developing the system.

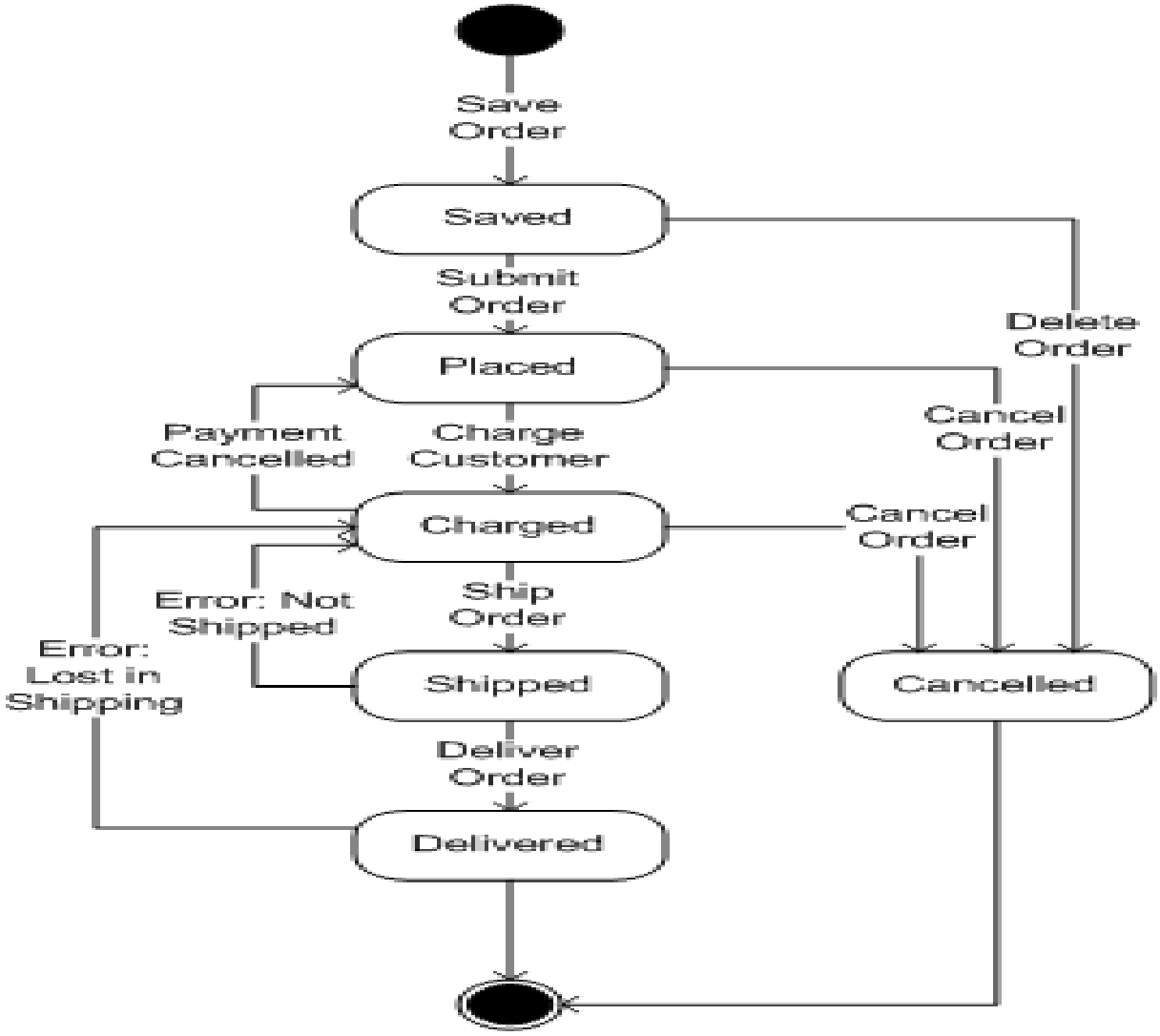


Figure 1: State diagram for e-commerce system

A report on context diagram

A context model is used to illustrate the operational context of the system. It shows what lies outside the system boundaries. This model is graphically shows the boundary that we are developing and the outside world. A context model describes about the system and its components related with each other.

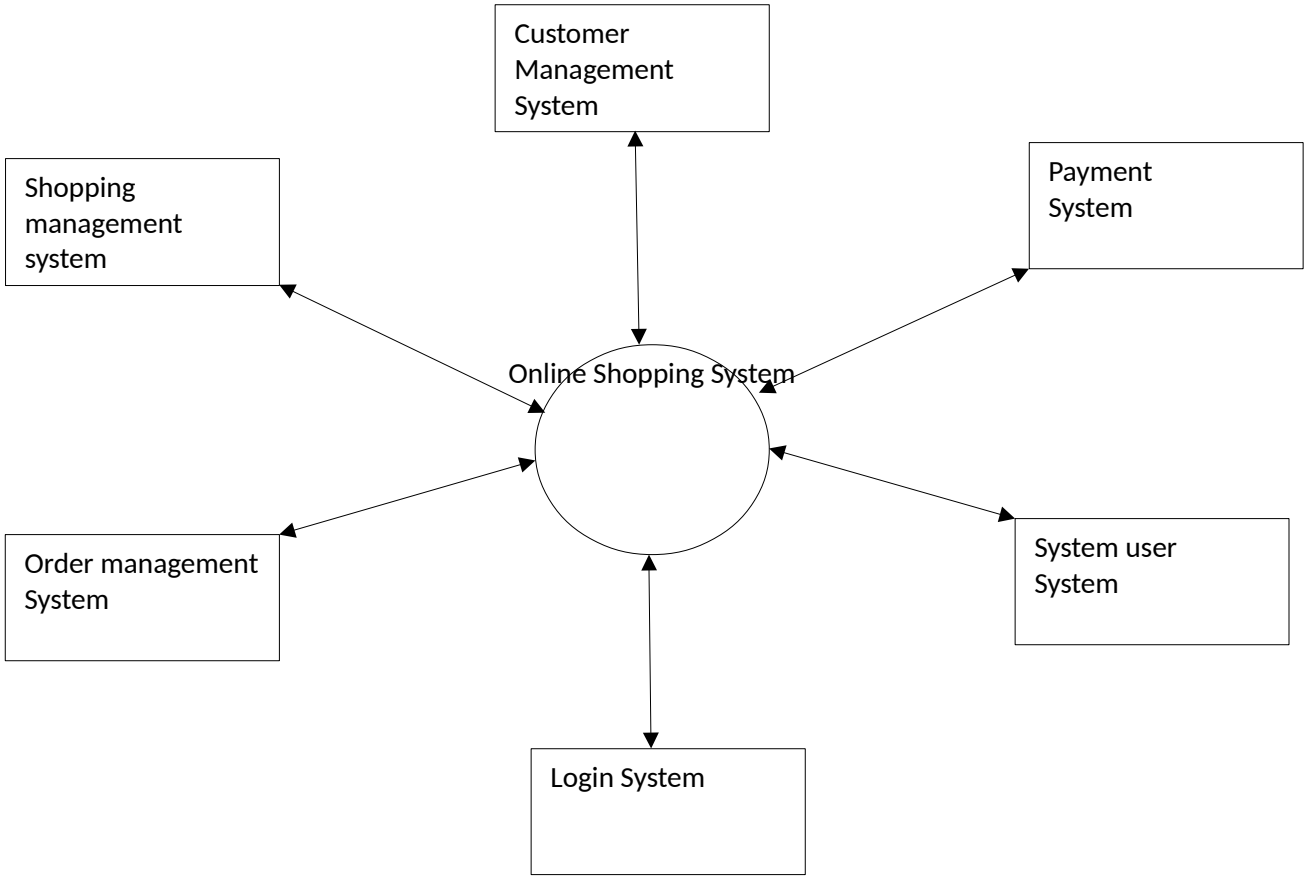


Figure 1: Context diagram for e-commerce system

A report on test case

The software testing is a process or an activity where the software testers tries to find out some problems, bugs and errors in the software system. Testing is intended to show that a program does what it is intended to do and to discover the program defects before it is put into use.

Project Name: Online shopping system						
Test case						
Test case: Tc-001 Test priority: medium Module Name: product addition system Test Title: Test for product addition Description: verify product addition			Test Design By : Test Design Date: Test Executed By: Test Executed Date:			
Preconditions : user has a valid product name and color						
step	Test steps	Test data	Expected result	Actual Result	Status (pass/fail)	Notes
1. 2. 3. 4.	Navigate to add product page Valid name Valid color Sign in	- Name=jeans Password =black -	User should be add product Can be entered Can be entered Product added	As expected As expected As expected Product successfully added	Pass Pass Pass pass	- - - -
Post condition : Product is added on the database and success message should be print.						

A report on sequence diagram

A sequence diagram is dynamic modeling approach in software designing process. It is an interaction model that describe in Unified Modeling Language (UML) as a behavioral model between classes or between object or between both.

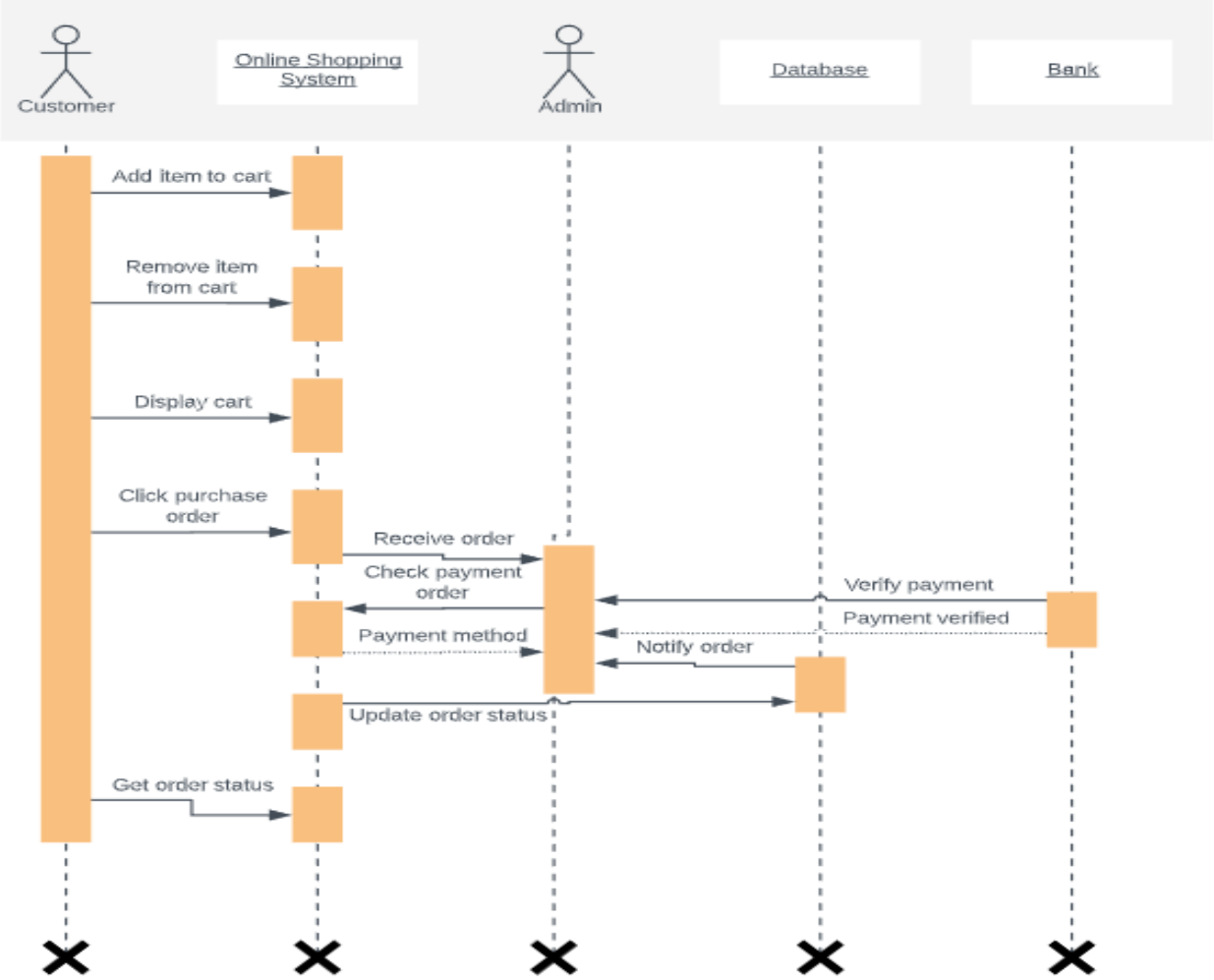


Figure 1: Sequence diagram for e-commerce system

A report on use-case diagram

A use case diagram is an illustration of the requirements that are require to build the software this diagram represents the functional requirements of a system and it is use in requirement elicitation and analysis process. It shows the interaction between the system functions (use cases) and the external environment (actors).

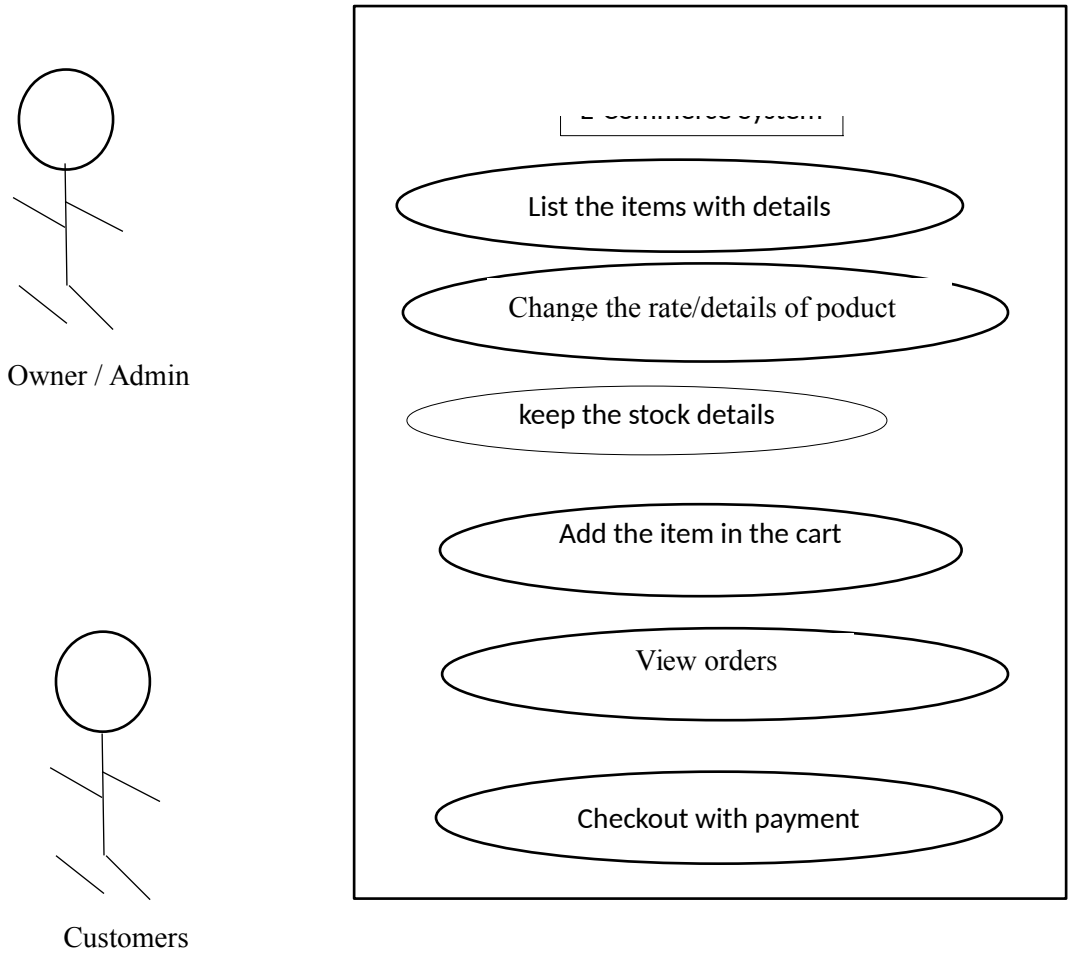


Figure 1: Use Case diagram for e-commerce system

A report on class diagram

A class diagram is a UML approach or technique of designing the system in an object oriented development life cycle. In this process of object oriented design, a class diagram is used to show the object classes in the system and the association between the classes.

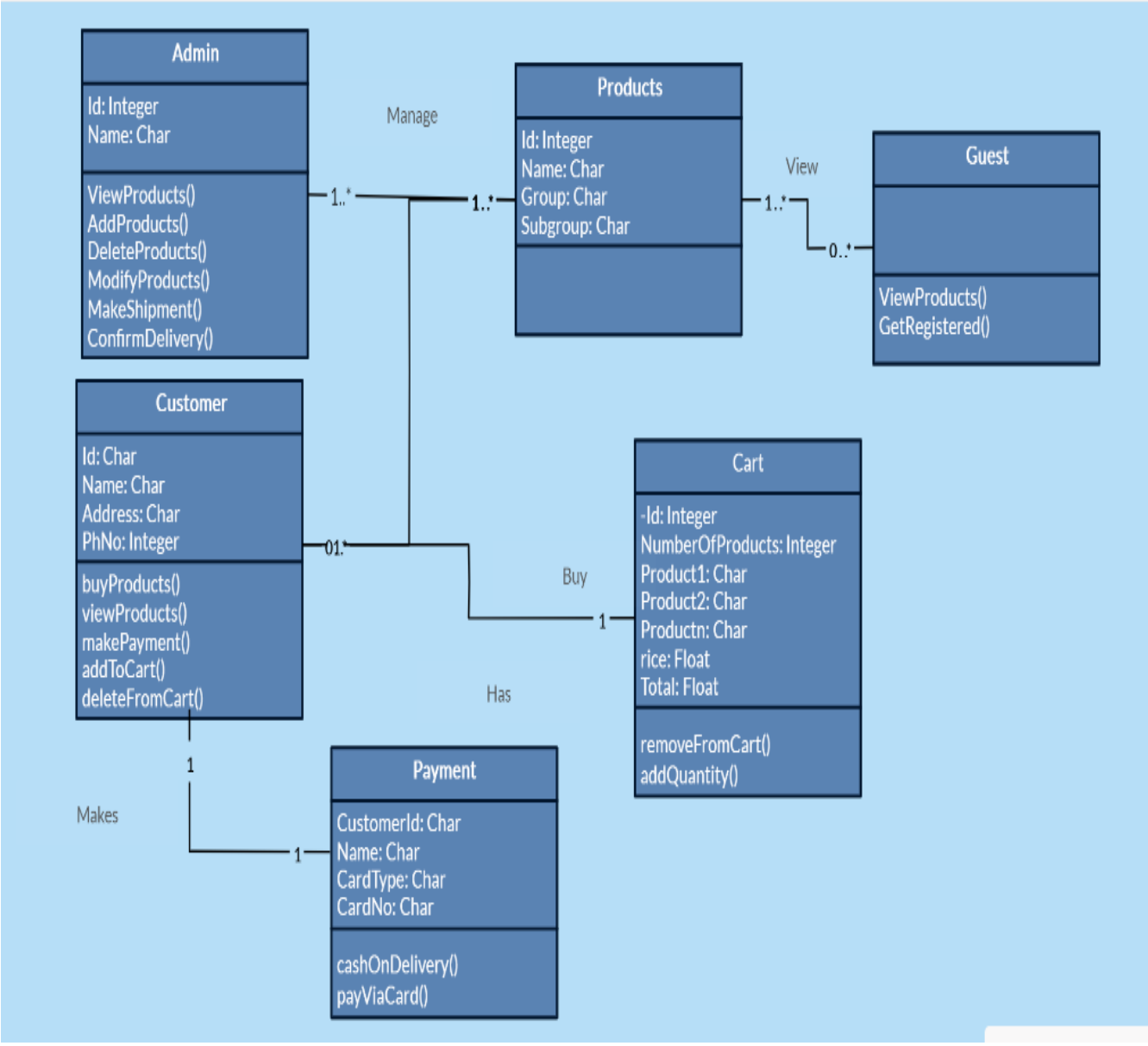


Figure 1: Class diagram for e-commerce system

Software Requirement Specification

A **software requirements specification** (SRS) is a detailed description of a software system to be developed with its functional and non-functional requirements. The SRS is developed based the agreement between customer and contractors. It may include the use cases of how user is going to interact with software system. The software requirement specification document consistent of all necessary requirements required for project development. To develop the software system we should have clear understanding of Software system. To achieve this we need to continuous communication with customers to gather all requirements.

Software Requirements Specification

For

E-commerce system

(A Web Based Application)

Version 1.0 approved

Prepared by: Rakesh Bhatt

Orchid International College

27th August, 2019

Contents

CHAPTER I INTRODUCTION

1.1. Background

This project E-commerce is basically developed a Web Application that depicts online shopping of Clothing and footwear using payment gateway method. Using this software, companies can improve the efficiency of their services. Online shopping is one of the applications to improve the marketing of the company's products. This web application involves all features of online shopping. This system eliminates the time and effort wasted in shop to shop visit.

1.2. Introduction of the Organization

"Eg looks" is a well-established company located at Bhimsengola Kathmandu. It manages a product, customer, and supplier relationship. It currently uses the paper form to store the records.

1.2.1. Mission of the Organization

The mission of the Eg Looks is to distribute clothing products all over the Nepal but in initial phases it is more focusing delivery inside the valley. It is a well-marketed organization. The primary goal is to provide quality online service and delivery of the products.

1.3. Current Situation of the Organization

1.3.1. Services

Services provided by the Eg Looks:

- Huge availability of quality wears in the market.
- Wide range of footwear and clothing.

1.3.2.Technology

- The paper form is used to store the data entry, later updated in computer.
- For e.g. Microsoft Excel.

1.3.3. Marketing Tools

- Advertisement
- Online Marketing

1.4. Problem of the Project

The problem of the project is that the software at initial phase cannot be covered out of valley. Due to time limitation all the aspect cannot be covered.

1.5. Objectives of the Project

The main purpose of "E-commerce system" is to build a web application that can keep records of customers, their online orders. To build a form to add or modify customers and product details, etc.

1.5.1 General Objectives

- To build a web application to sale the product online of their choice.

1.5.2. Specific Objectives

The specific objectives of preparing this project:

- To provide a web form to add records of users.
- To provide web form for product details.
- To provide reports of customers.
- To provide secure system such that unauthorized user should not access the system.

1.6. Methodology

1.6.1.Data and Information

The data regarding the employees are collected from the interview method. The data and requirements are collected by the personal interview method. A list of questionnaire is prepared to collect the system requirement. The managing director is happy to provide complete the details of the organization.

1.6.2. Project Framework

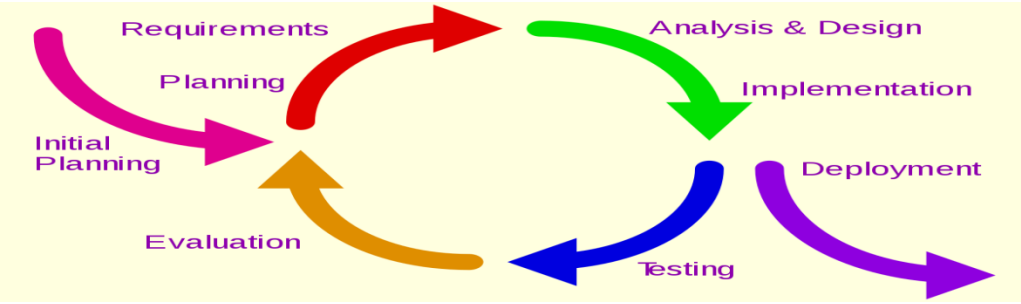


Fig 1.1. Incremental Model

Requirement Planning:

This is the first stage where the requirements are collected from the users and then analyze them. The objectives & vision of software products in set by formulating the functional requirements and non functional requirements of the system.

Analysis & Design:

During this stage the detailed design of system is produced. The software design, architecture, interface, forms and reports database design etc.

Implementation:

In this stage the designs are converted into programmable codes. The models, functions components, classes are tested.

Integration and Testing:

During this stage, every individual unit is collected and then integrated to the main system to the main system to ensure that there are no design flows, an integration test is conducted.

1.7. Tools Used

- **HTML**

  HTML is the standard markup language for Web pages. In this projects the forms are developed by HTML.

- **Bootstrap**

  It is the most popular CSS Framework for developing the website. The different classes of bootstrap are used in this project.

- **Java**

  Java is a general-purpose programming language that is class-based, object-oriented language. The entire project is developed in Java.

- **XAMPP**

  XAMPP is an Apache distribution containing MySQL, PHP and Perl.

- **MySQL**

  MySQL server is a SQL complaint server, in other words it is a relational model database server. This database is used in the project.

1.8. Techniques of the project report

- **Use-Case Diagram**

This is the visual representation of the functional requirements of the system. A use case model is used in analysis phase of requirement engineering process.

- **ER model**

An entity relationship diagram shows the relationships of entity sets stored in a database. An entity in this context is an object, a component of data.

- **Relational model**

It shows the relational relationship between the ER model.

CHAPTER II Task and Activities performed

2.1 Analysis of Task and activities

To analyze any problem or situation, the study of the organization is must. For this the recommendation letter is provided by the college for visiting the organization. The organizational visit gives us the scenario of the organization business activities. The interview method is applied to know about the current situation of the organization as well as to analyze the task and activities of the particular organization. After gathering the information, it was found that the organizational need the online services for its product and extends the market.

Table 2.2 List the products

Use-case identifier	UC1: List their tickets
Primary Actor	Owner
Secondary Actor	Admin
Description	The owner should be able to add the products. There must be details of the products.
Pre-condition	The owner should be logged in. The item should not be already listed.
Post-condition	The database must be updated. The proper message should be shown.
Success Scenario	The item change should be reflect in database.
Failure Scenario	The database is not updated.

Table 2.3 Change the details of products

Use-case identifier	UC2: Change the rates /details of products.
Primary Actor	Owner
Secondary Actor	Admin
Description	The owner should be able to add the products with their details.
Pre-condition	The owner should be logged in. The price should be modified.
Post-condition	The database must be updated.
Success Scenario	The database should be changed. The update should be reflected on front panel.
Failure Scenario	The database is not updated.

Table 2.4 keeps the stock detail

Use-case Identifier	UC3: keeps records of stocks.
Primary Actor	Admin
Secondary Actor	None
Description	The administrator keeps the record of the stock available. It allows to view the records of the purchase and sales.
Pre-condition	The admin can only view the record after logged in.
Post-condition	The database must be updated.
Success Scenario	Stock is available and the latest updated stock is viewed.
Failure Scenario	The database is not connected or updated.

Table 2.5 View the records of order

Use-case Identifier	UC4: View records of order
Primary Actor	Customer
Secondary Actor	None
Description	The administrator keeps records of order of the customers like orderid, orderDate, DeliveryDate, status, deliveryDate. Etc And customers can view it.
Pre-condition	The customers have ordered before.
Post-condition	The record must be shown to the customers.
Success Scenario	The database should be connected to show the records.

Failure Scenario	The database is not connected and records can’t be shown.

Table 2.6 Add the item into the cart

Use-case identifier	UC5: Add the item into the cart.
Primary Actor	Customer
Secondary Actor	None
Description	The customer should be able to add the products into the cart.
Pre-condition	The customer should choose the item first.
Post-condition	The database must be updated.
Success Scenario	The record should be added on the record table.
Failure Scenario	The database is not updated.

Table 2.7 Checkout the products

Use-case identifier	UC6: Change the rates /details of products.
Primary Actor	Customer
Secondary Actor	None
Description	The Customer should be able to select the checkout option.
Pre-condition	The customer should be logged into the system.
Post-condition	The data should be inserted into the payment table.
Success Scenario	The database should be changed. The update should be reflected on database.
Failure Scenario	The database is not updated.

2.2. ER Diagram