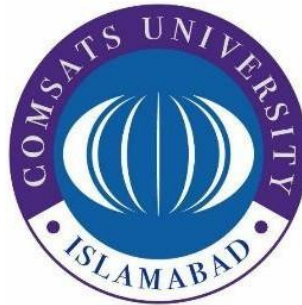


Sale Motivator

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**DEPARTMENT OF COMPUTER SCIENCES
COMSATS UNIVERSITY ISLAMABAD,
ATTOCK CAMPUS – PAKISTAN**

SESSION 2017-2021

Sale motivator

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A DISSERTATION SUBMITTED AS A PARTIAL FULFILLMENT OF THE
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DEPARTMENT OF COMPUTER SCIENCES
COMSATS UNIVERSITY ISLAMABAD,
ATTOCK CAMPUS – PAKISTAN

SESSION 2017-2021

UNDERTAKEN

We certify that this is our own work. The work has not, in whole or in part, been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged. If this statement is untrue, we acknowledge that we will have committed an assessment offence and shall be liable to punishable action under the plagiarism rules of HEC.

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FINAL APPROVAL

It is certified that we have read this project report submitted by **Hammad Khan (CIIT/FA17-BCS-096/ATK)** and **Muhammad Umar (CIIT/FA17-BCS-100/ATK)** and it is, in our judgment, of sufficient standard to warrant its acceptance by Department of Computer Science, COMSATS university Islamabad, Attock campus, for the BS degree in Computer Science.

Committee:

1. External Examiner

(Examiner Name)
Designation
University Name

2. Supervisor

(Supervisor Name)

3. Chairperson

(Chairperson Name)

4. Dean/Director

(Dean/Director Name)

DEDICATION

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

All praise is to Almighty Allah who bestowed upon us a minute portion of His boundless knowledge by virtue of which we were able to accomplish this challenging task.

We are greatly indebted to our project supervisor “Mr. Rehan Chohan”. Without his personal supervision, advice and valuable guidance, completion of this project would have been doubtful. We are deeply indebted to him for his encouragement and continual help during this work.

And we are also thankful to our parents and family who have been a constant source of encouragement for us and brought us the values of honesty & hard work.

Muhammad Umar

Hammad Khan

ACKNOWLEDGEMENT

“No portion of the work referred to in the dissertation has been submitted in support of an application for another degree or qualification of this or any other university/institute or other institution of learning”.

Muhammad Umar

Hammad Khan

PROJECT BRIEF

PROJECT NAME	SALE MOTIVATOR
ORGANIZATION NAME	SHOPIFY
OBJECTIVE	ECOMMERCE
UNDERTAKEN BY	HAMMAD KHAN MUHAMMAD UMAR
SUPERVISED BY	MR. REHAN CHOCHAN LECTURER CS DEPARTMENT COMSATS UNIVERSITY ISLAMABAD, ATTOCK CAMPUS
STARTED ON	OCTOBER, 2020
COMPLETED ON	CONTINUE
COMPUTER USED	HP CORE I5 6 th GEN
SOURCE LANGUAGE	RUBY ON RAIL
OPERATING SYSTEM	WINDOW 10
TOOLS USED	VISUAL STUDIO, MS WORD

ABSTRACT

Web based business is quick making strides as an acknowledged and utilized business worldview. Increasingly more business houses are actualizing sites giving usefulness to performing business exchanges over the web. It is sensible to state that the way toward shopping on the web is getting to be typical.

The goal of this undertaking is to build up an app which boost the sales of the online store through encourage the customers to purchase more products.

An online store is a virtual store on the Internet where clients can peruse the list and select results of intrigue. The choose things might be gathered in a shopping basket. At checkout time, the things in the shopping basket will be displayed as a request. Around then, more data will be expected to finish the exchange.

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Chapter 1

INTRODUCTION

1.1 Introduction

In our sale motivator application merchant will set their goals to maximize average order value. Our application will suggest different ways to increase average order value. Let suppose merchant want to increase the average order value to the 100\$. Our application will suggest giving free shipping or surprise gift to the customer if they buy more then 100\$.

When the customer visits online store, an announcement bar will appear above the header that will show a message “free shipping for all orders above over 100\$” which will encourage the customers to buy more products and increase the average order value of merchant.

The importance of that is a well-designed sale motivator application could contribute to business is significant. Merchants can boost their average order value to their desire by setting goals in our sale motivator application.

1.1 Project Background

Shopify is one of the most growing ecommerce platform in the world. Many international brands move their business to shopify like Hasbro, Bulletproof, The Economist, Heinz and Tesla. According to the need of ecommerce market we want to develop an application which promotes the sales of the merchant. This application helps the merchant to increase his sale and generate more income.

We setup a goal such a ‘Free Shipping on orders over \$100’ or “Free Gift on over 50\$” in Shopify. Then, you create the same goal within Motivator. Once they are setup you can display your messaging to customers. Each time a customer clicks "Add to Cart," he'll see a message telling him how much more he need to spend to reach the goal. Customize your text to resonate with your customers.

1.2 Literature Review

As we have mentioned that we are developing our system by analyzing some of the best systems like Amazon, EBay etc. Our project mainly focuses on these systems.

1.2.1 Amazon

The success of Amazon is all due to its innovative ideas and implementation of those ideas which attract customers to buy more. Amazon is using mixture of ideas i.e. free gifts, free shipping and different promos that attract customers to buy more things. It helps the merchants to increase their sale and engage more and more customers through gave them different offers.

That's why Amazon is the biggest ecommerce plat form in the World.

1.2.2 EBay

People come to eBay because they want to buy things to keep, not because they want to buy things to return. Buyers will be suspicious of sellers that don't offer returns. Stand by your product and offer a 30-day return policy on everything. Remember that you are dealing with people who are making buying decisions. Treat customers the way you would want to be treated. A positive professional attitude, prompt communication, and the willingness to keep customers happy will result in more sales on eBay. Merchants gave special discount, free shipping, buy one get one free and promos to increase their sale and get more orders through this.

1.3 Analysis from Literature Review

Amazon and EBay both are one of the biggest ecommerce platforms in the world. They both use different ways to attract their customers to buy more and more. Sometimes they gave free shipping, free gifts, promos and different offers like "buy one get one free" or "buy two get one free" to engage more customer due to these techniques their sales are increase and small merchants earn more revenue. Merchants use many apps to do that like they buy one app for free shipping and second app for free gifts so the merchant use different apps for different offers or promos.

1.4 Methodology and Software Lifecycle for this Project

Online Collaboration System is structured utilizing 'The cascade demonstrates'. The Waterfall model was the main organized development method to deal with software

developments in a systematic way. The Waterfall is only a period requested a rundown of processes to be performed to get an IT system.

The exercises in the Waterfall model are:

1.4.1 System Analysis

This step alludes to the get-together of the system requirement, with the objective of deciding how this prerequisite will be incorporated into the complete working software. Broad correspondence between the client and the developer is basic. Amid System Analysis Feasibility Studies are likewise conveyed to ensure the progress of the final product.

1.4.2 System Design

Once the requirement has been gathered and broke down into modules, it is important to recognize in detail how the system will be developed to play out the essential errands. All the more explicitly, the framework configuration stage is centered around the information about the system (what is the final purpose of the system), the product development (by what method will the Application be built) and the interface structure and coding (what will the system resemble?)

1.4.3 Development

Diverse coding plans were utilized to code distinctive module of the framework. HTML, CSS, and JavaScript are utilized to build up the front connection and responsiveness as per conditions forced by the client. SQL databases are mindful to hold the information related and basic for conveying the last items. Django is an abnormal state Python Web structure has been utilized to guarantee fast advancement and clean, pragmatic plan. It deals with a great part of the issues of Web development, so we can concentrate on composing our application without expecting to reinvent or reevaluate the wheel.

Chapter 2

PROBLEM DEFINITION

2.1 Problem Statement

Small merchants who can't get enough sale from their store, they don't know how to engage customers and gave them benefit to purchase things they use many different apps to engage customers and pay much price to these app due to which the ratio of their profit become very low. Our idea is to build a single app which can do all those things that merchants do with the help of three to four apps. The main problem is that the merchant engage his customers with the help of three to four apps which affect his profit badly because every app gets much money. So our single app can do all the tasks of merchant that he do with the help of three to four apps. Our app charge less money as compared to those apps due to which the profit of the merchant will increase and all his tasks will be done by only single app.

2.2 Deliverables and Development Requirements

Deliverables and Development requirements of our project are following:

2.2.1 Deliverables of Project

- Proposal document
- Software Requirement Specification
- Desktop Application
- Database for Desktop Application
- Software Design Specification
- Classification Module

2.2.2 Development Requirement

- Microsoft Office
- Microsoft Visio
- Ruby on Rail

2.3 Current System

Current system is not good for small merchants because merchants have to pay a lot of money every month to many apps for convince their customers to buy more products, due to much money the profit of the merchants decreases i.e. if a merchant wants to gave free shipping to his customers then he use separate app for this and if he

gave free gifts to his customers then he use separate app for this and also if he gave free promos to his customers then he also buy another app for that purpose. He has to pay all these apps to use them. If he ay all these three apps every month then his profit will decreases. So if he uses only one app for all these tasks then he has to pay less to this single app as compared to those three apps. Due to this his own profit margin increases.

Chapter 3

REQUIREMENT ANALYSIS

3.1 Use Case Diagram

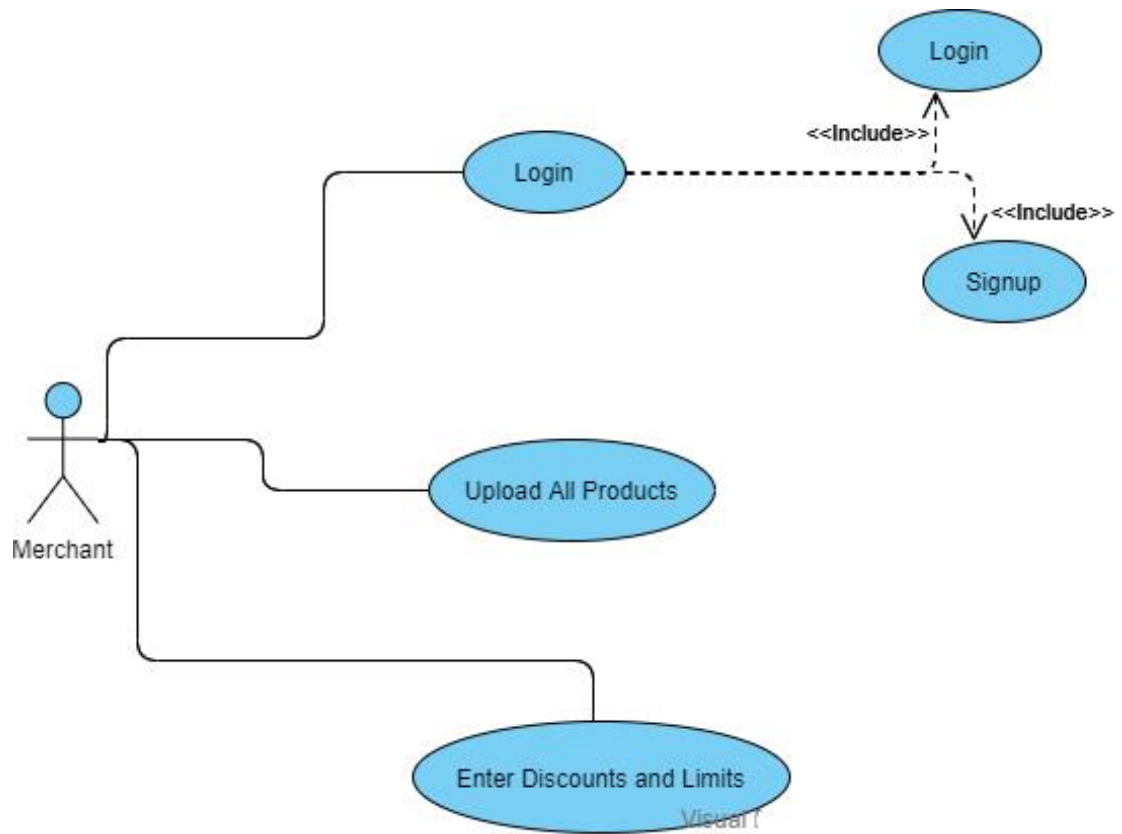


Figure 3.1: Use Case Diagram

3.2 Detailed Use Case

Table 3.2.1: Use Case 1 (User Sign in)

Use Case ID:	1
Use Case Name:	Sign in
Actors:	Primary Actor: User
Description:	In the startup view of application, there is login page where user will enter his credentials to login in his account. But before that user must have login credentials.
Trigger:	1. User wants to predict about any case. 2. Check case studies
Preconditions:	PRE-1. System should not be logged in before. PRE-2. User must have credentials to login.
Post conditions:	The user will able to Sync all his products.
Normal Flow:	1. Open application on system. 2. Put Email in required email input field. 3. Put Password related to that email account. 4. Click on Login button to go further. 5. Home page will appear if credentials are verified. 6. Error will appear on screen if credentials are wrong.
Alternative Flows:	There is no alternative way to login to the application user must have to access to application first to logged in.
Exceptions:	1. User doesn't have account already. 2. Server out of order. 3. Forgot Password.
Business Rules:	None
Assumptions	None

Table 3.2.2: Use Case 2 (User Sign Up)

Use Case ID:	2
Use Case Name:	Signup
Actors:	Primary Actor: User
Description:	If user doesn't have account already, so first, user will create its profile to access application for further uses. Once user profile created user can login anytime using their credentials.
Trigger:	New User.
Preconditions:	PRE-1.Signed Out.
Post conditions:	User can use application for their purposes.
Normal Flow:	1. Open application on system. 2. Click on don't have account. 3. Fill required form. 4. Click on Signup button.
Alternative Flows:	There is no alternative way to login to the application user must have to access to application first to create his account.
Exceptions:	None
Business Rules:	None
Assumptions	None

Table 3.2.3: Use Case 3 (Upload All products)

Use Case ID:	3
Use Case Name:	sync all products
Actors:	Primary Actor: User
Description:	User will sync all his store products into the application
Trigger:	New User.
Preconditions:	PRE-1.Login.
Post conditions:	User can use application for their purposes.
Normal Flow:	<ol style="list-style-type: none">1. Open application on system.2. Put Email in required email input field.3. Put Password related to that email account.4. Click on Login button to go further.5. Home page will appear if credentials are verified.6. Click on Sync button to give access to all products.
Alternative Flows:	There is no alternative way
Exceptions:	User don't have any product
Business Rules:	None
Assumptions	None

Table 3.2.4: Use Case 4 (Enter Discounts and Limits)

Use Case ID:	4
Use Case Name:	Enter discount and Limits
Actors:	Primary Actor: User
Description:	User will enter different limits that how much shopping is required to get free discounts.
Trigger:	New User.
Preconditions:	PRE-1. Login. PRE-2. Sync all products.
Post conditions:	User can active all his discounts and promos.
Normal Flow:	<ol style="list-style-type: none">1. Open application on system.2. Put Email in required email input field.3. Put Password related to that email account.4. Click on Login button to go further.5. Home page will appear if credentials are verified.6. Click on set discounts.7. Enter all your limits and discount.8. Click on OK button to set your entered discount.
Alternative Flows:	There is no alternative way
Exceptions:	User don't have any product
Business Rules:	None
Assumptions	None

3.3 Functional Requirements

Functional requirements of the system are as follows:

- Log in
- Sign up
- Access to store
- Enter Discounts and set limit
- Gave discount to customers when limit reach

3.4 Non-Functional Requirements

3.4.1 Usability

It should have user friendly interface and should be easy to learn and use.

3.4.2 Efficiency

System should be efficient. The results should take less time to computer and display.

3.4.3 Robustness

System should recover from errors and error rate should be low.

Chapter 4

DESIGN AND ARCHITECTURE

4.1 System Architecture

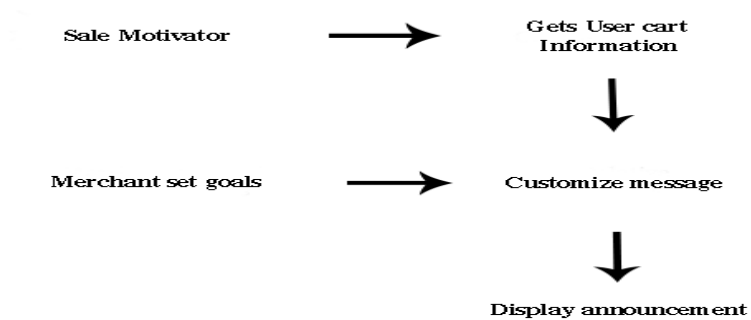


Figure 4.1: System Architecture

4.2 Sequence Diagram

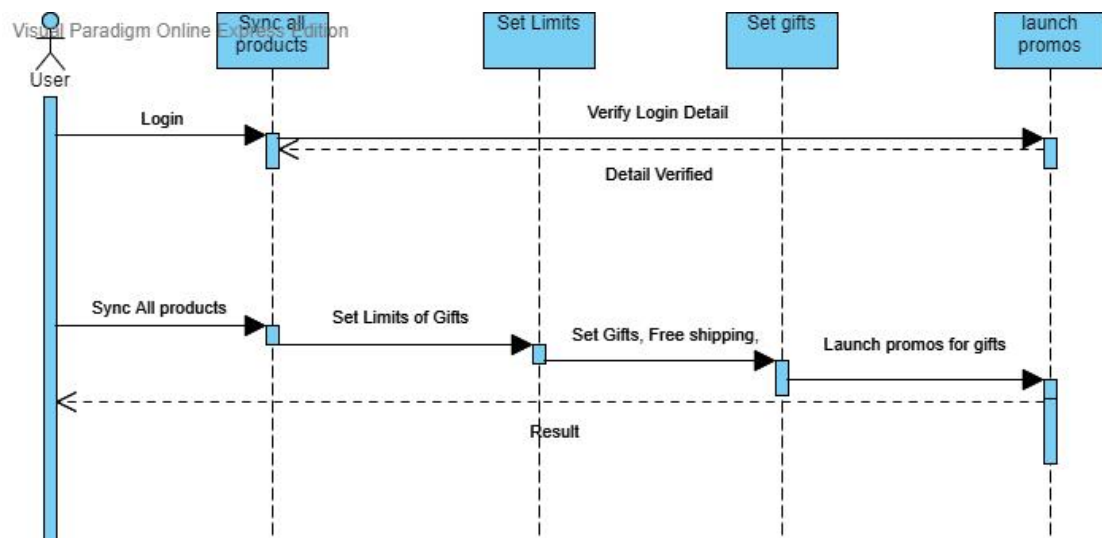


Figure 4.3: Sequence Diagram

4.3 Activity Diagram

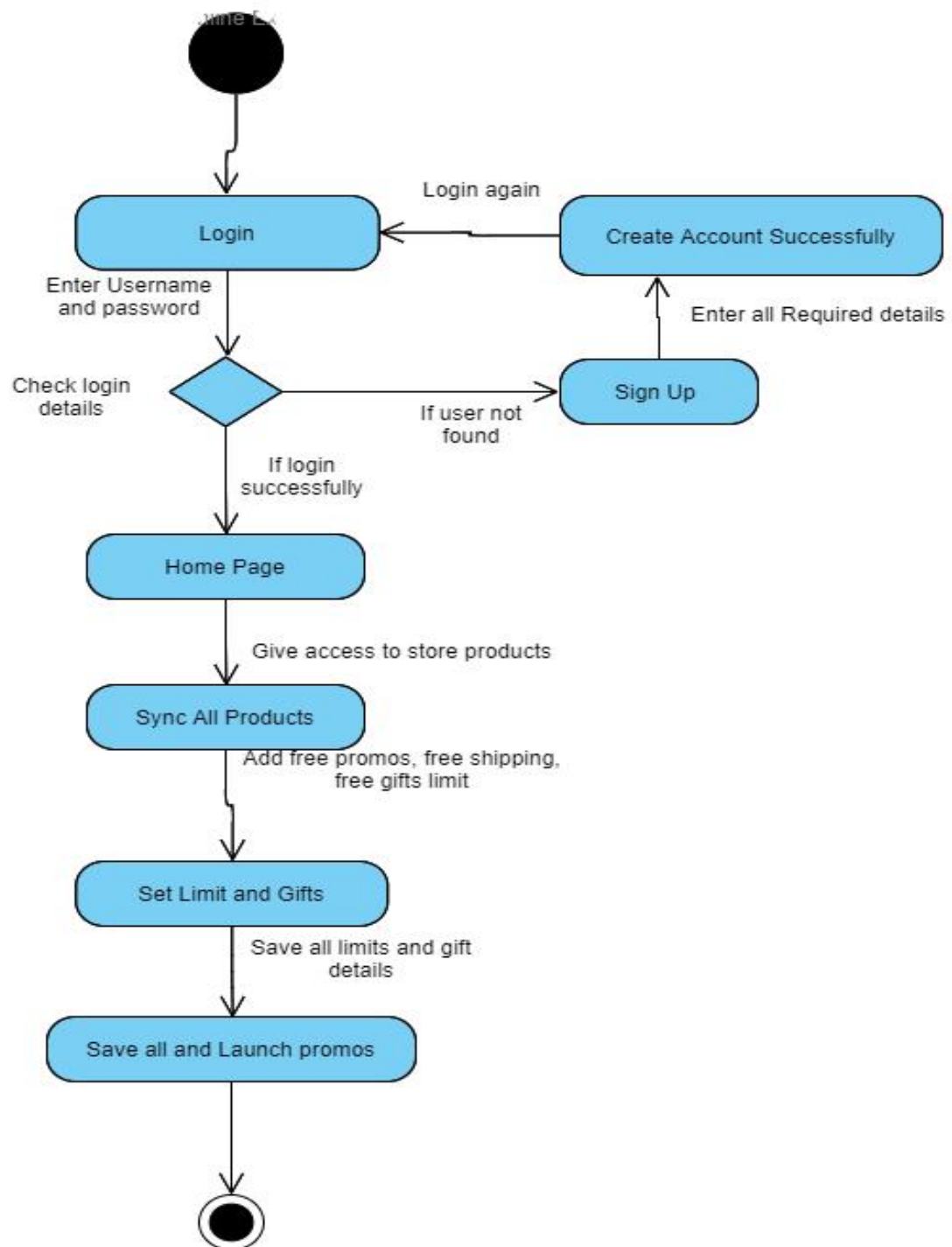


Figure 4.4: Activity Diagram

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