# **Pitch Connect**



# By:

Muhammad Faisal Rashid 33418

Muhammad Ahsan Akmal 35781

Muhammad Junaid Ul Hassan 37627

**Supervised by:** 

Mr. Waqar Arshad

Faculty of Computing
Riphah International University, Islamabad
Fall 2024

#### A Dissertation Submitted To

# **Faculty of Computing,**

# Riphah International University, Islamabad

# As a Partial Fulfillment of the Requirement for the Award of the

Degree of

**Bachelors of Science in Software Engineering** 

Faculty of Computing Riphah International University, Islamabad

Date: Dec 08, 2023

### **Final Approval**

This is to certify that we have read the report submitted by Muhammad Faisal Rashid (33418), Muhammad Ahsan Akmal (35781) and Muhammad Junaid Ul Hassan (37627) for the partial fulfillment of the requirements for the degree of the Bachelors of Science in Software Engineering (BSSE). It is our judgment that this report is ofsufficient standard to warrant its acceptance by Riphah International University, Islamabad for the degree of Bachelors of Science in Software Engineering (BSSE).

#### **Committee:**

Mr. Waqar Arshad (Supervisor)

Dr. Musharraf Ahmed
(Head of Department/chairman)

#### **Declaration**

We want to make it clear that our document, "Pitch Connect," is entirely our own work, and we haven't copied it from anywhere. We've put in our personal efforts to complete this project along with the report. Our teachers, especially our supervisor Mr. Waqar Arshad, guided us throughout the process. We promise that none of the content in our system is taken from any other source or copied from another project. If it's proven otherwise, and any part is found to be a reproduction of someone else's work, we're ready to face the consequences. This declaration reflects our commitment to honesty and accountability in our academic endeavors.

**Muhammad Faisal Rashid** 

33418

**Muhammad Ahsan Akmal** 

35781

**Muhammad Junaid Ul Hassan** 

37627

# **Dedication**

We dedicate this project to Allah Almighty, our Creator, who has been our unwavering source of strength, wisdom, and guidance throughout this journey. We also extend this dedication to our families, friends, and teachers. Their constant encouragement and support have played a vital role in the successful completion of this project. Our deepest appreciation goes to our supervisor, Mr. Muhammad Waqar Arshad, for his insightful guidance and mentorship, along with all the faculty members who have contributed to our academic growth.

# Acknowledgement

First and foremost, we express our deepest gratitude to Allah Almighty, the Most Merciful and the Source of all wisdom, for giving us the strength and knowledge to successfully complete this project. We would also like to extend our heartfelt thanks to our supervisor, Mr. Waqar Arshad, for his constant encouragement, patience, and valuable insights. His practical guidance, helpful advice, and innovative ideas have been invaluable throughout the course of this project. Without his unwavering support, this project would not have come to fruition. Additionally, we are thankful to all the faculty members for their continued assistance.

**Muhammad Faisal Rashid** 

33418

**Muhammad Ahsan Akmal** 

35781

**Muhammad Junaid Ul Hassan** 

37627

## **Abstract**

In today's fast-paced world, the challenge of connecting entrepreneurs with potential investors has become increasingly significant. Many entrepreneurs struggle to secure funding, while investors find it difficult to discover promising startups that align with their interests. Pitch Connect an innovative web-based platform designed to bridge this gap efficiently.

Pitch Connect allows entrepreneurs to present their business ideas through an engaging Idea Pitch Room, where they can upload multimedia presentations and essential business documents. Investors can explore various projects and interact with entrepreneurs, facilitated by a messaging system that involves platform administrators for message approvals until a deal is finalized. It provides a comprehensive solution that addresses the current inefficiencies in connecting entrepreneurs and investors.

# **Table of Contents**

Chapter 1: Introduction	1
1.1 Overview	2
1.2 Opportunity & Stakeholders	2
1.3 Motivations and Challenges	2
1.4 Goals and Objectives	3
1.5 Solution Overview	4
1.6 Report Outline	4
Chapter 2: Literature / Market Survey	5
2.1 Introduction	6
2.2 Literature Review/Technologies Overview	6
2.3 Summary	7
Chapter 3: Requirement Engineering	8
3.1 Introduction	9
3.2 Problem Scenarios	9
3.3 Functional Requirements	9
3.4 Non-Functional Requirements	11
3.5 SQA activities: Defect Detection	11
Chapter 4: System Design	23
4.1 Introduction	24
4.2 Architectural Design	24
4.3 Class Diagram	25
4.4 Activity Diagram	26
4.5 Use Case Diagram	28
4.6 Fully Addressed Use Cases	30
Chapter 5: Implementation	35
5.1 IDE, Tools and Technologies	36
5.2 Best Practices / Coding Standards	36
Chapter 7: Conclusion and Outlook	37
7.1 Introduction	38
7.2 Achievements and Improvements	38
7.3 Critical Review	38
7.4 Future Recommendations/Outlook	38
7.5 Summary	39

# **List of Figures**

Figure 4.1 Architecture Diagram	24
Figure 4.2 Class Diagram	25
Figure 4.3 Client Activity Diagram	26
Figure 4.4 Admin Activity Diagram	27
Figure 4.5 Admin Use Case Diagram	28
Figure 4.6 Client Use Case Diagram	29

# **List of Tables**

Table 2.1 Existing System	6
Table 3.1 Problem Statement 1	9
Table 3.2 Problem Statement 2	9
Table 3.3 Problem Statement 3	9
Table 3.4 User Registration	12
Table 3.5 User Registration Valid	12
Table 3.6 User Registration In-Valid	12
Table 3.7 User Registration In-Valid	12
Table 3.8 User Registration In-Valid	13
Table 3.9 Valid Login Credentials	13
Table 3.10 In-Valid Login Credentials	13
Table 3.11 In-Valid Login Credentials	13
Table 3.12 In-Valid Login Credentials	13
Table 3.13 Valid Check Order	14
Table 3.14 Valid Check Order	14
Table 3.15 In-Valid Check Order	14
Table 3.16 In-Valid Check Order	14
Table 3.17 Valid Check Payments	14
Table 3.18 In-Valid Check Payments	14
Table 3.19 Valid Printing Copies	15
Table 3.20 In-Valid Printing Copies	15
Table 3.21 In-Valid Printing Copies	15
Table 3.22 Valid Distribution Type	15
Table 3.23 In-Valid Distribution Type	15
Table 3.23 In-Valid Distribution Type	16
Table 3.24 Valid Distribution Tab	16
Table 3.25 In-Valid Distribution Tab	16
Table 3.26 In-Valid Distribution Tab	16
Table 3.27 Valid Paying Distributor	16
Table 3.28 In-Valid Paying Distributor	17
Table 3.29 Valid Distribution Cost	17
Table 3.30 In-Valid Distribution Cost	17
Table 3.31 In-Valid Distribution Cost	17
Table 3.32 Valid Paper Type	17
Table 3.33 In-Valid Paper Type	18

Table 3.34 In-Valid Paper Type	18
Table 3.35 Valid Vehicle Media	18
Table 3.36 In-Valid Vehicle Media	18
Table 3.37 In-Valid Vehicle Media	18
Table 3.38 Valid Vehicle Media Route	19
Table 3.39 In-Valid Vehicle Media Route	19
Table 3.40 In-Valid Vehicle Media Route	19
Table 3.41 Valid Ad Cost	19
Table 3.42 In-Valid Ad Cost	19
Table 3.43 In-Valid Ad Cost	20
Table 3.44 Valid Map	20
Table 3.45 In-Valid Map	20
Table 3.46 In-Valid Map	20
Table 3.47 Valid Quotation	21
Table 3.48 In-Valid Quotation	21
Table 3.49 In-Valid Quotation	21
Table 3.50 Valid Client Login Credentials	21
Table 3.51 In-Valid Client Credentials	21
Table 3.52 In-Valid Client Login Credential	21
Table 3.53 Valid Generate Quotation	22
Table 3.54 In-Valid Generate Quotation	22
Table 3.55 In-Valid Generate Quotation	22
Table 4.1: Check Order	30
Table 4.2: Check Payment	30
Table 4.3: Check History	30
Table 4.4: Register Distributor	31
Table 4.5: Track Distributor	31
Table 4.6: Pay Distributor	31
Table 4.7: Print Design	32
Table 4.8: Check Order History	32
Table 4.9: Select Map	32
Table 4.10: Select Design	33
Table 4.11: Generate Quotation	33
Table 4.12: Place Order	34

# **Chapter 1: Introduction**

# Introduction

#### 1.10verview

Pitch Connect is a comprehensive web-based platform designed to connect entrepreneurs seeking funding with investors looking for potential startups to invest in. The platform streamlines the pitching and funding process by providing features such as video pitch rooms, contract management, and business document handling. Entrepreneurs can create detailed profiles, present their startup ideas, and specify their funding requirements. Investors can explore these profiles, engage with entrepreneurs through integrated messaging and video calling, and negotiate investment contracts. Pitch Connect also promotes social responsibility by allocating a portion of successful investment returns to charitable causes.

#### 1.2 Opportunity & Stakeholders

The primary opportunity lies in addressing the inefficiencies in the traditional investorentrepreneur connection process. Entrepreneurs often face challenges finding investors who align with their vision, while investors struggle to identify promising startups. Pitch Connect simplifies this process by offering a user-friendly platform that enhances visibility, communication, and trust between the two parties.

#### 1.2.1 Stakeholders

- 1. Entrepreneurs
- 2. Investors
- 3. Admin

#### 1.3 Motivation and Challenge

Pitch Connect aims to bridge the gap between entrepreneurs and investors by providing a platform for entrepreneurs to showcase their innovative ideas through short videos. This model is increasingly relevant in the era of digital networking, where accessibility and direct connections are essential for success. Here are some motivations and challenges of Pitch Connect.

#### 1.3.1 Motivations of Pitch Connect

- 1. Efficiency: By providing an all-in-one platform, Pitch Connect saves time for both entrepreneurs and investors by offering tools for quick communication, contract management, and document handling.
- 2. Visibility: Entrepreneurs can feature their startups at the top of search results for enhanced visibility, increasing the likelihood of attracting investors.
- 3. Social Responsibility: The integration of a charity module incentivizes entrepreneurs and investors to engage in socially responsible practices by allocating a portion of investment returns to charity.
- 4. Streamlined Contracts: The use of digital signatures through DocuSign allows for efficient and secure contract handling between entrepreneurs and investors.

#### 1.3.2 Challenges of Pitch Connect

- 1. Competition: There are several platforms in the market aiming to connect entrepreneurs and investors, which requires Pitch Connect to offer unique features and seamless functionality to stand out.
- 2. Trust: Building trust between entrepreneurs and investors, especially in virtual negotiations, can be challenging, necessitating secure communication and contract features.
- 3. User Engagement: Sustaining long-term engagement from both entrepreneurs and investors is critical for the success of the platform, which can be a challenge if the platform does not continually innovate.

## 1.4 Goals and Objectives

Pitch Connect project goals can be to:

#### 1.4.1 Increase Startup Visibility

One of the core objectives of Pitch Connect is to provide entrepreneurs with better visibility by featuring their ideas in front of relevant investors through video pitch rooms and featured idea placements.

#### 1.4.2 Facilitate Investor-Entrepreneur Interaction

Pitch Connect seeks to enable seamless communication between investors and entrepreneurs via real-time messaging, video calls, and contract management, facilitating faster and more transparent negotiations.

#### 1.4.3 Encourage Social Responsibility

The Social Prosperity feature, Pitch Connect aims to promote a culture of social responsibility by allowing a portion of returns to be allocated to charitable causes from successful investments.

#### 1.4.4 Simplify Contract Management

Integrating with DocuSign, Pitch Connect ensures that contracts are signed, managed, and archived digitally, reducing the complexity and time involved in investment deals.

#### 1.5 Solution Overview

Pitch Connect offers an integrated solution for the investor-entrepreneur relationship. The platform includes features for creating detailed profiles, showcasing startup ideas through video pitches, managing contracts, and integrating communication tools. With payment systems and document management, the platform covers all aspects of the funding process. By encouraging social responsibility and improving visibility for entrepreneurs, Pitch Connect addresses the current inefficiencies in the investment market.

# 1.5.1 Scope of the Project

#### For Entrepreneurs

- 1. Profile Creation
- 2. Video Pitch Room
- 3. Business Document Handling
- 4. Social Prosperity Module

#### **For Investors**

- 1. Investment Opportunity Search
- 2. Real-time Communication with Entrepreneurs
- 3. Contract Management through DocuSign

#### For Admin

- 1. User Management
- 2. Payment Management
- 3. Compliance Management

# 1.6 Report Outline

Chapter 1 covers the overview of the Pitch Connect platform, including its goals and objectives, the existing problems in the market, and how the proposed solution aims to address them. The scope of the project is detailed, covering all features available to entrepreneurs, investors, and platform administrators. The chapter also discusses motivations and challenges for the platform.

# Chapter 2: Market Survey

#### 2.1 Introduction

Conducting a market analysis is essential to understanding the current solutions and gaps within the entrepreneurial funding domain. For this purpose, we surveyed existing platforms that facilitate connections between entrepreneurs and investors, engaging with stakeholders, including entrepreneurs who have used these platforms. This survey highlighted significant gaps in current offerings, such as a lack of real-time communication tools, complex onboarding processes, and limited options for pitching ideas effectively. Furthermore, current platforms don't fully address trust-building, comprehensive contract handling, or a social responsibility component.

The market analysis identified a substantial need for a streamlined, all-in-one platform that simplifies connections between investors and entrepreneurs. Insights from this survey will enable us to build a system that directly addresses the limitations of existing systems, providing a more seamless experience for both entrepreneurs and investors. Pitch Connect will improve communication, increase visibility for entrepreneurs, and simplify contract and fund management.

#### 2.2 Literature Review

We reviewed popular platforms in the entrepreneurial funding space, analyzing their features and limitations. Most platforms enable entrepreneurs to showcase business ideas but lack robust contract management, secure payment handling, and integrated communication channels. This highlights opportunities for improvement in addressing these gaps.

Table 2.1: Existing System

Features	AngelList	CrunchBase	Seed Invest	Pitch Connect
<b>Profile Creation</b>	YES	YES	YES	YES
Idea Pitch Room	NO	NO	YES	YES
Real Time Communication	NO	NO	NO	YES
Contract Management with Douc-Sign	NO	NO	NO	YES
Social Responsibility	NO	NO	NO	YES
Featured Ideas	NO	NO	NO	YES

This comparison reveals that Pitch Connect stands out in its provision of video-based pitching rooms, real-time communication, and a social responsibility module, features that are either absent or underdeveloped in competing platforms. The integrated e-signature function, enabled by DocuSign, also simplifies contract handling, making Pitch Connect a more robust, end-to-end solution for both parties.

# 2.3 Summary

Our market survey and literature review indicate that while several existing systems facilitate connections between entrepreneurs and investors, they do not fully meet the requirements of modern entrepreneurial funding. Key features such as efficient contract management, enhanced communication, and social responsibility are underdeveloped or absent, leading to gaps that Pitch Connect can fill. Feedback from stakeholders reinforced the need for a platform that emphasizes usability, security, and direct communication between parties.

Based on these findings, Pitch Connect is positioned to introduce innovative features that address current market demands, offering a more streamlined and effective solution. Our goal is to differentiate Pitch Connect by creating a reliable, feature-rich platform that fosters trust and transparency, ultimately making the investment process more accessible and efficient for all stakeholders.

Chapter 3:
Requirement
Engineering

# 3.1 Introduction:

In this chapter we will discuss all functional and nonfunctional requirements of Pitch Connect. Additionally, we detail the problem scenarios that drive the need for developing this system, aiming to bridge the gap between entrepreneurs and investors with an efficient, transparent platform.

# 3.2 Problem Scenarios

Table 3.1: Problem statement 1

The Problem of	Lack of an efficient platform connecting entrepreneurs with suitable
	investors
Affects	Startups, Entrepreneurs, Investors
The Result of	Missed investment opportunities, slower business growth, inefficient pitch
which	processes
Benefits of	Streamlined connections, targeted networking, and effective funding for
	startups

Table 3.2: Problem statement 2

The Problem of	High cost and time consumption in arranging in-person meetings for pitching
Affects	Entrepreneurs, Investors
The Result of Which	Increased expenses, limited engagement between parties, delayed funding decisions
Benefits of	Reduced travel costs, efficient virtual pitch meetings, faster investment decisions

Table 3.3: Problem statement 3

The Problem of	Limited access to a comprehensive, user-friendly platform for presenting business ideas
Affects	Startups, New Entrepreneurs
The Result of which	Difficulty in showcasing ideas effectively, reduced visibility, missed funding opportunities
Benefits of	Enhanced visibility, a streamlined platform for pitching, better chances for funding success

# **3.3 Functional Requirements**

#### 3.3.1 For Admin

1. Admin should be able to login to the system.

- 2. Admin should be able to add user accounts for entrepreneurs and investors.
- 3. Admin should be able to update user accounts for entrepreneurs and investors.
- 4. Admin should be able to deactivate user accounts for entrepreneurs and investors.

#### 3.1.1 Entrepreneur Management

- 1. Admin should be able to approve entrepreneur profiles.
- 2. Admin should be able to reject entrepreneur profiles.
- 3. Admin should be able to approve pitch material submitted by entrepreneur.
- 4. Admin should be able to reject pitch material submitted by entrepreneur.
- 5. Admin should be able to review user content if policy violates.
- 6. Admin should be able to edit user content if policy violates.
- 7. Admin should be able to delete user content if policy violates.
- 8. Entrepreneur should be able to upload pitch videos.
- 9. Entrepreneur should be able to create profiles with detailed business information.
- 10. Entrepreneur should be able to specify their funding requirements.

#### 3.1.2 Contract Management

- 1. Admin should be able to monitor contract created by DocuSign.
- 2. Admin should be able to generate reports on signed contracts.
- 3. Admin should be able to generates reports on pending contracts.
- 4. The admin should be able to track payments processed through Stripe.

#### 3.1.3 Investor Management

- 1. Admin should be able to monitor investor profiles for compliance.
- 2. Admin should be able to monitor investor profiles for legitimacy.
- 3. Investor should be able to create profiles outlining their investment interests.
- 4. Investor should be able to specify their area of expertise.

#### 3.1.4 Idea Pitch Room

- 1. Entrepreneur should be able to upload video pitch presentation.
- 2. Investor should be able to view video pitch presentation.
- 3. Investor should able to leave comments on pitch videos.
- 4. Investor should be able to initiate follow up actions on pitch videos.

#### 3.1.5 Social Prosperity

- 1. Admin should be able to track the total funds raised for charity.
- 2. The admin should be able to allocate a percentage of investment returns to charitable causes.

#### 3.1.6 Featured Ideas

- 1. Entrepreneurs should be able to pay for ad promotions to increase the visibility of their pitches.
- 2. The admin should be able to track featured ideas.
- 3. Admin should be able to manage the promotion slots for equitable distribution.

#### 3.1.7 Communication Management

- 1. Entrepreneurs should be able to send real-time messages to investors to initiate discussions.
- 2. Entrepreneurs should be able to initiate video calls with investors.
- 3. Investors should be able to send real-time messages to entrepreneurs to initiate discussions.
- 4. Investors should be able to initiate video calls with entrepreneurs.

# 3.2 Nonfunctional requirements

There are no specific NFR in our system.

# 3.3 SQA activities

**Defect Detection:** 

We applied black box testing technique for defect detection and designed our test cases.

# 3.3.1 Test Case Design:

**Functional Requirement Test Cases** 

# 3.5.1.1 User Registration

Table 3.4: User Registration

Input	Valid Class	<b>Invalid Class</b>
Username	{aA,bB,,zZ} {0,1,2,,9}	Outside valid class
Email	$\{aA,bB,,zZ\}$	Outside valid class
	{0,1,2,,9} {@}	
Password	Length>=8	Outside valid class
	{aA,bB,,zZ} {0,1,2,,9}	
	{!,@,#,}	
Confirm Password	Length>=8	Outside valid class
	$\{aA,bB,\ldots,zZ\}$	
	{0,1,2,,9}	
	{!,@,#,}	

Table 3.5: User Registration Valid

Test case id: 01	username	email	Password
Input	NajeebTahir	tahir@gmail.com	Tahir@125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
<b>Expected Output</b>	Valid input	Valid input	Valid input

Table 3.6: User Registration In-Valid

Test case id: 02	username	email	<b>Password</b>
Input	Najeeb\$Tahir12	tahir%gmail.com	T@125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
<b>Expected Output</b>	Enter valid username.	Enter valid email.	Enter valid password.

Table 3.7: User Registration In-Valid

Test case id: 03	username	email	Password
Input	1255	6@gmail.com	Th@125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
<b>Expected Output</b>	Enter valid	Enter valid email.	Enter valid password.

Table 3.8: User Registration In-Valid

Test case id: 04	username	email	Password
Input	Najo	najogmail.com	tah
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
<b>Expected Output</b>	Enter valid username.	Enter valid email.	Enter valid password.

# 3.5.1.2 User Login

Table 3.9: Valid Login Credentials

Test case id: 05	email	Password
Input	tahir@gmail.com	Tahir@125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
Expected Output	Login successful.	Login successful.

Table 3.10: In-Valid Login Credentials

Test case id: 06	email	Password
Input	tahgmail.com	tahir@125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
Expected Output	Enter valid email.	Enter valid password

Table 3.11: In-Valid Login Credentials

Test case id: 07	email	Password
Input	@gmail.com	tahir
ECP	{aA,bB,,zZ}	Length>=8
Expected Output	Enter valid email.	Enter valid password.

Table 3.12: In-Valid Login Credentials

Test case id: 08	email	Password
Input	Thir@125	125
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {@}	Length>=8 {aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
Expected Output	Enter valid email.	Enter valid password.

# 3.5.1.3 Check Orders

Table 3.13: Valid Check Order

Input	Valid Class	Invalid Class
Check Orders	{aA,bB,,zZ} {0,1,2,,9}	Outside valid class

Table 3.14: Valid Check Order

Test case id: 9	Check Orders
Input	How many new orders are placed and how many completed in an array of 20
<b>Partition Tested</b>	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Question created.

Table 3.15: In-Valid Check Order

Test case id: 10	Check Orders
Input	1256
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid statement

Table 3.16: In-Valid Check Order

Test case id: 11	Check Orders
Input	!@#\$@#12345
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid statement

# 3.5.1.4 Check Payments

Table 3.17: Valid Check Payments

Test case id: 13	Payment Status
Input	@12\$345
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid input

Table 3.18: In-Valid Check Payments

Test case id: 13	Payment Status
Input	5thousend rupees
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid input

# 3.5.1.5 Printing Copies

Table 3.19: Valid Printing Copies

Test case id: 14	Print copies
Input	Take design from the client and print 500 copies
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Copies printed.

Table 3.20: In-Valid Printing Copies

Test case id: 15	Print copies
Input	12345
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid statement

Table 3.21: In-Valid Printing Copies

Test case id: 16	Print copies
Input	Num1000
Partition Tested	{aA,bB,,zZ} {0,1,2,,9}
Expected Output	Enter valid statement

# 3.5.1.6 Distribution Type

Table 3.22: Valid Distribution Type

	* 1
Test case id: 17	Distribution type
Input	This distribution type is residential and the order is for sector G-10 and G-11 Islamabad
PartitionTested	{Aa,,Zz} {0,1,2,3,} {!,@,#,}
ExpectedOutput	Valid statement

Table 3.23: In-Valid Distribution Type

Test case id: 18	Distribution type
Input	@/G-10
PartitionTested	{Aa,,Zz} {0,1,2,3,} {!,@,#,}
Expected Output	Enter valid statement

Table 3.23: In-Valid Distribution Type

Test case id: 19	Distribution type
Input	#/G-eleven
PartitionTested	{Aa,,Zz} {0,1,2,3,} {!,@,#,}
Expected Output	Enter valid statement

# 3.5.1.7 Distributor Tab

Table 3.24: Valid Distribution Tab

Test case id: 1	Registered Distributors
Input	The total number of distributors in our system are 150
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {!,@,#,\$,}
Expected Output	Valid statement

Table 3.25: In-Valid Distribution Tab

Test case id: 2	Registered Distributors
Input	Num=155
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
Expected Output	Enter valid statement

Table 3.26: In-Valid Distribution Tab

Test case id: 3	Registered Distributors
Input	Distributer#191
Partition Tested	{aA,bB,,zZ} {0,1,2,,9} {!,@,#,}
Expected Output	Enter valid statement

# 3.5.1.8 Paying Distributor

Table 3.27: Valid Paying Distributor

Test case id: 10	Pay distributor
	@AsifAli you have completed your task and your payment
Input has	has been successfully transferred Rs:25,000 to your Account
	No: 55429785789
Partition Tested	{Aa,,Zz}
	{0,1,2,3,}
	{@,\$,%,&}
<b>Expected Output</b>	Valid statement

Table 3.28: In-Valid Paying Distributor

Test case id: 11	Pay distributor
Input	#20000 Rs transferred to account 55429785789
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

# 3.5.1.9 Distribution Cost

Table 3.29: Valid Distribution Cost

Test case id: 12	Distribution Cost
510 %	The total distribution cost of Bilal's marketing project in
Input	sector G-9 and G-10 Islamabad is
=	Rs :30,000
	{Aa,,Zz}
<b>Partition Tested</b>	{0,1,2,3,}
	{@,\$,%,&}
Expected Output	Valid statement

Table 3.30: In-Valid Distribution Cost

Test case id: 13	Distribution Cost
Input	Total cost=30,000Rs
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Table 3.31: In-Valid Distribution Cost

Test case id: 14	Distribution Cost
Input	G-9, G-10 project cost is 30000
Partition Tested	{Aa,,Zz} {0,1,2,3,}
	{@,\$,%,&}
Expected Output	Invalid Statement

# **3.5.1.10** Paper Type

Table 3.32: Valid Paper Type

Test case id: 15	Paper type
Input	The paper type for this project is Glossy and its size is A4.
<b>Partition Tested</b>	{Aa,,Zz} {0,1,2,3,}
Expected Output	Valid statement

Table 3.33: In-Valid Paper Type

Test case id: 16	Paper type
Input	#reflexive/ size is b4
Partition Tested	{Aa,,Zz} {0,1,2,3,}
Expected Output	Invalid Statement

Table 3.34: In-Valid Paper Type

Test case id: 17	Paper type
Input	Matt with A4
<b>Partition Tested</b>	{Aa,,Zz} {0,1,2,3,}
Expected Output	Invalid Statement

#### 3.5.1.11 Vehicle Media

Table 3.35: Valid Vehicle Media

Test case id: 1	Vehicles number
Input	In system, the total number of registered vehicles is 117 since January, 01, 2022 until now
Partition Tested	$\{Aa,,Zz\}$ $\{0,1,2,3,\}$
Expected Output	Valid statement

Table 3.36: In-Valid Vehicle Media

Test case id: 2	Vehicles number
Input	#68 vehicle are register
Partition Tested	Aa,,Zz $\{0,1,2,3,\}$
Expected Output	Enter valid statement

Table 3.37: In-Valid Vehicle Media

Test case id: 3	Vehicles number
Input	89/ since january 2022
Partition Tested	{Aa,,Zz} {0,1,2,3,}
Expected Output	Enter valid statement

# 3.5.1.12 View Vehicle Route

Table 3.38: Valid Vehicle Media Route

Test case id: 4	Vehicles route
Input	The Vehicle (Van) with registration number BRB 430 route is from Rawat to Taxila.
Partition Tested	{Aa,,Zz} {0,1,2,3,}
Expected Output	Valid statement

Table 3.39: In-Valid Vehicle Media Route

Test case id: 5	Vehicles route
Input	#rawat to #taxila
Partition Tested	{Aa,,Zz} {0,1,2,3,}
Expected Output	Invalid Statement

Table 3.40: In-Valid Vehicle Media Route

Test case id:6	Vehicles route
Input	*Taxila to /peshawar
Partition Tested	{Aa,,Zz} {0,1,2,3,}
Expected Output	Invalid Statement

# 3.5.1.13 Advertising Cost w.r.t Time

Table 3.41: Valid Ad Cost

Test case id: 7	Advertising Cost
Input	The vehicle [BRB 449] is hired for 2 weeks and its advertising cost is Rs. 6,000.
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Valid statement

Table 3.42: In-Valid Ad Cost

Test case id: 8	Advertising Cost
Input	(BRJ 668) hired for week
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Table 3.43: In-Valid Ad Cost

Test case id: 9	Advertising Cost
Input	Advertising cost for this vehicle is #7000 Rs
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

# 3.5.1.14 Map

Table 3.44: Valid Map

Test case id: 1	Map providing
Input	Sector G-11 which has 200 Houses, 5 Parks, 10 Mosques, 4 supermarkets, and 7 schools.
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Valid statement

Table 3.45: In-Valid Map

Test case id: 2	Map providing
Input	G-9 has #180 homes and offices
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Table 3.46: In-Valid Map

Test case id: 3	Map providing
Input	@G-10 has 156 houses and schools
Partition Tested	{Aa,,Zz}
	{0,1,2,3,}
	{ @,\$,%,&}
Expected Output	Invalid Statement

# **3.5.1.15 Quotation**

Table 3.47: Valid Quotation

Test case id: 1	Map providing
Input	The MOQ is 1,000 flyers for sector G-10 with the total marketing price of Rs.25,000.
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Valid statement

Table 3.48: In-Valid Quotation

Test case id: 2	Map providing
Input	The price for sector @ G-9 is 20000
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Table 3.49: In-Valid Quotation

Test case id: 3	Map providing
Input	25000 is the price for sector #G-10
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

#### 3.5.1.16 Client

Table 3.50: Valid Client Login Credentials

Test case id: 1	Name
Input	Najeeb Tahir
Partition Tested	{aA,bB,cC,,xX, yY,zZ}
Expected Output	no error

Table 3.51: In-Valid Client Login Credentials

Test case id: 2	Name
Input	M.r_Najeeb
Partition Tested	{aA,bB,cC,,xX,yY,zZ }
Expected Output	Please enter only alphabets

Table 3.52: In-Valid Client Login Credentials

Test case id: 3	Name
Input	tahir@125
Partition Tested	{aA,bB,cC, ,xX,yY,zZ}
Expected Output	Please enter only alphabets

# **3.5.1.17** Generate Quotation

Table 3.53: Valid Generate Quotation

Test case id: 4	Generate Quotation
Input	Map's Selected area: G-10
	Number of copies: 1000
	Time duration: 1 week
	Total Advertising Cost :Rs 25,000.
Partition Tested	{Aa,,Zz}
	{0,1,2,3,}
	{ @,\$,%,&}
Expected Output	Valid statement

Table 3.54: In-Valid Generate Quotation

Test case id: 5	Generate Quotation
Input	@ G-9 advertising for 2 week
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Table 3.55: In-Valid Generate Quotation

Test case id: 6	Generate Quotation
Input	1500 flyers for sector #G-9
Partition Tested	{Aa,,Zz} {0,1,2,3,} {@,\$,%,&}
Expected Output	Invalid Statement

Chapter 4: System Design

#### 4.1 Introduction

Design is a significant engineering representation of something that is intended to be constructed. It is derived from the customer's requirements. Without proper design, there is a risk of developing an unstable system that may fail when even minor changes are made. It could also be challenging to test such a system, and its quality may only be assessed late in the software development process, when time is limited, and a considerable amount of money has already been invested. In this chapter, we will explore the importance of design, the paradigm employed in this project, and the architecture chosen for the development of our marketing project.

# 4.2 Architectural Design

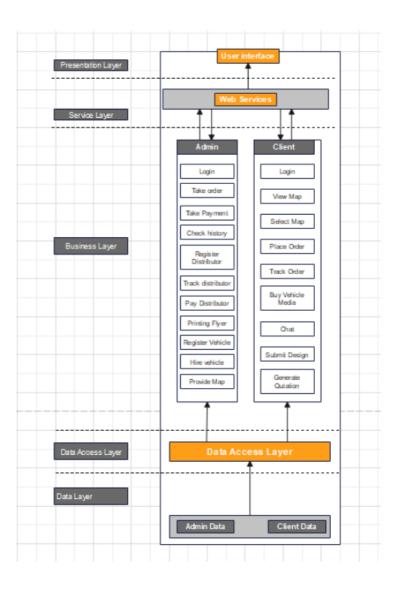


Figure 4.1: Architecture Diagram

# 4.3 Class Diagram

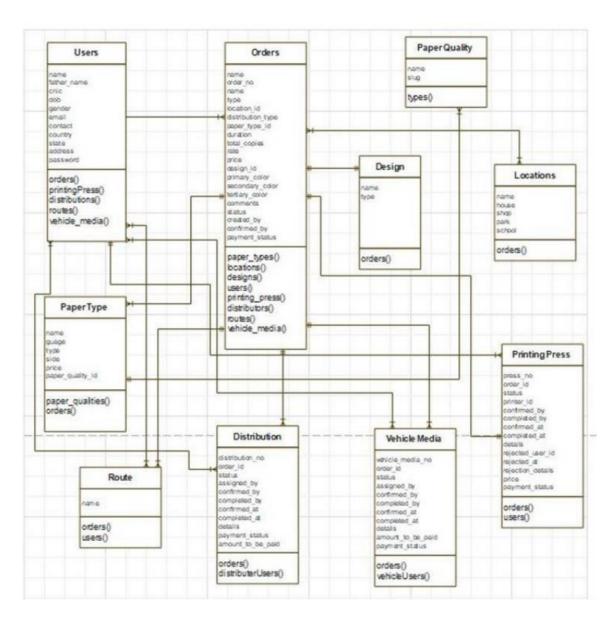


Figure 4.2: Class Diagram

# 4.4 Activity Diagrams:

# **4.4.1** Client

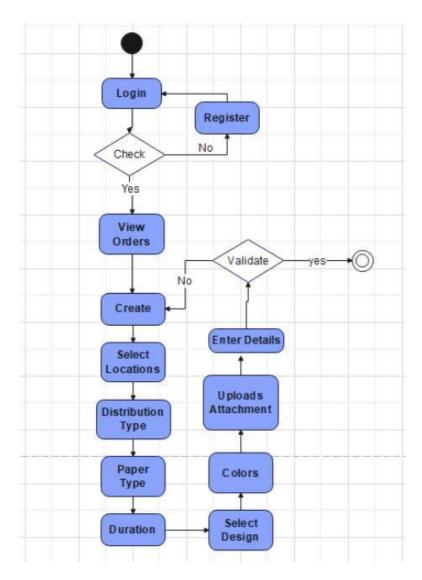


Figure 4.3: Client Activity Diagram

# 4.4.2 Admin

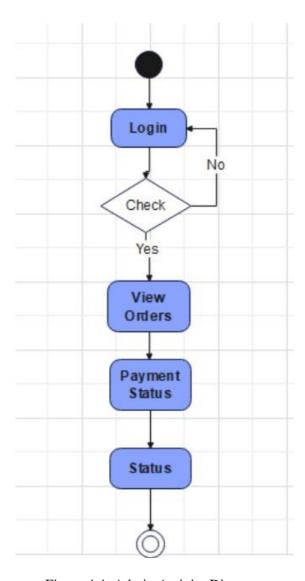


Figure 4.4: Admin Activity Diagram

# 4.5 Use Case Diagram

# 4.5.1 Admin:

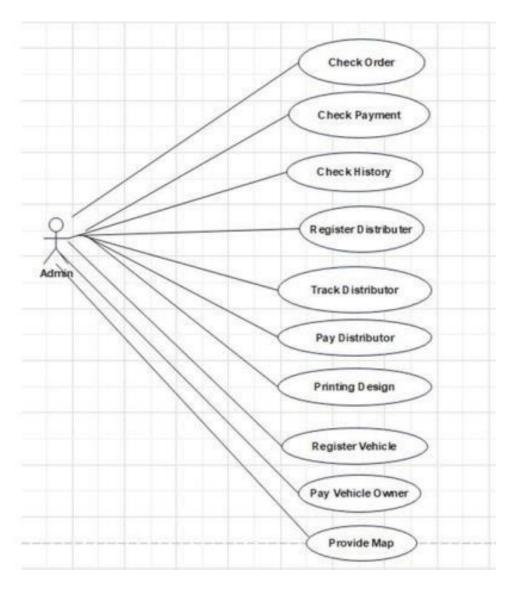


Figure 4.5: Admin Use Case Diagram

# 4.5.2 Client:

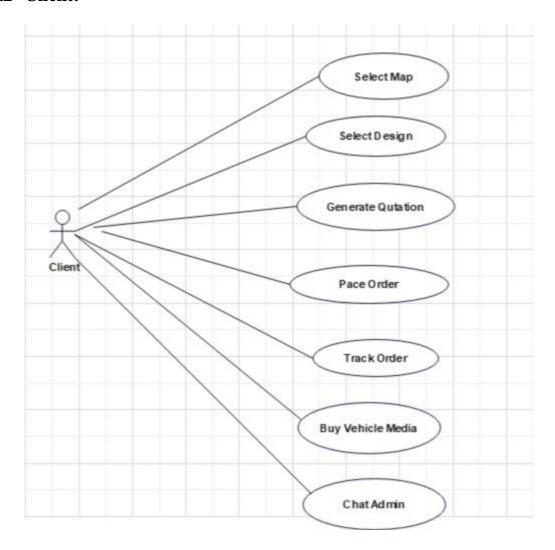


Figure 4.6: Client Use Case Diagram

# 4.6 Fully Address Use Cases

# 4.1.1 Admin

Table 4.1: Check Order

UC-ID#1	
Use Case Name: Ch	neck Order
Primary Actor: Ad	min
Pre-Condition:	
1. Admin must	be login to the system.
Post-Condition: 1. Admin will b	be able to view Customers Order.
	Admin initiate this use case by clicking "Orders" module
	<ol><li>System displays the orders management dropdown list</li></ol>
Main Scenario	3. New Orders
	4. Completed Orders
	5. Admin can check detail any of these by simply clicking
	anyone
Alternate	Redirect to back with error message.

Table 4.2: Check Payment

UC-ID#2	
Use Case Name: Ch	eck Payment
Primary Actor: Ad	min
<b>Pre-Condition:</b>	
1. Admin must	be logged in to the system.
Post-Condition: 1. Admin will b	e able to check payment.
Main Scenario	Admin initiate this use case by clicking "Orders" module     System displays the orders management dropdown list
Alternate	Redirect to back with error message.

Table 4.3: Check History

UC-ID # 3	
Use Case Name: Ch	neck History
Primary Actor: Ad	min
<b>Pre-Condition:</b>	
<ol> <li>Admin must</li> </ol>	be logged in to the system.
<b>Post-Condition:</b>	
<ol> <li>Admin will b</li> </ol>	be able to check the history of orders.
Main Scenario	Admin initiate this use case by clicking "Orders" module     System displays the orders management dropdown list     Admin click on orders tab.     Admin can search for any order.
Alternate	Redirect to back with error message.

Table 4.4: Register Distributor

UC-ID # 4	
Use Case Name: Re	gister Distributer
Primary Actor: Ad	min
Pre-Condition: 1. Admin must	be logged in to the system.
Post-Condition: 1. Admin will b	be able to register a distributor.
Main Scenario	Admin initiates this use case by visiting user management module from admin dashboard.     2. Admin clicks on the add new button.     3. A system displays a registration form dashboard.     4. Admin clicks on the add new button.     5. A system displays a registration form     6. Admin can register by entering all the related data.     7. Admin submits the form     8. System displays data in the tabular form
Alternate	Redirect to back with error message.

Table 4.5: Track Distributor

UC-ID # 5	
Use Case Name: Tr	ack Distributor
Primary Actor: Ad	min
Pre-Condition:	
1. Admin must	be logged in to the system.
Post-Condition:	
<ol> <li>Admin will b</li> </ol>	be able to track a distributor.
	Admin initiates this use case by visiting distribution
	module from admin dashboard.
Main Caspania	<ol><li>Admin clicks on tracking.</li></ol>
Main Scenario	<ol><li>System shows a Google Sheet.</li></ol>
	4. Admin can add the start and end time of distributor's
	task
Alternate	Redirect to back with error message.

Table 4.6: Pay Distributor

UC-ID # 6	
Use Case Name: Pa	y Distributor
Primary Actor: Ad	min
Pre-Condition: 1. Admin n	nust be logged in to the system.
Post-Condition: 1. Admin s	hould be able to pay distributor.
Main Scenario	Admin initiates this use case by visiting distribution
	module from admin dashboard.
	<ol><li>Admin clicks on order.</li></ol>
	<ol><li>System will display options.</li></ol>
	<ol><li>Select any one option.</li></ol>
Alternate	Redirect to back with error message.

Table 4.7: Print Design

UC-ID # 7	
Use Case Name: Pr	inting Design.
Primary Actor: Ad	min
Pre-Condition: 2. Printing Pres	s User must be logged in to the system.
Post-Condition: 2. Printer Press	User will be able to print the design/copies.
Main Scenario	5. Press User initiates this use case by visiting printing module from the dashboard.  6. System shows a dropdown list of status:  New  Confirm  Complete  Press User mark confirm to before printing.  System will display all orders  Admin clicks on completed  10. The system will show all completed orders.
Alternate	Redirect to back with error message.

Table 4.8: Check Order History

UC-ID#8	
Use Case Name: Ch	eck Order History
Primary Actor: Ad	min
Pre-Condition: 1. Admin r	nust be logged in to the system.
Post-Condition: 1. Admin v	vill be able to view Quotation details.
Main Scenario	Admin clicks on order module from dashboard     System will show different status of orders.     Admin clicks on new orders     System will show analytics to admin
Alternate	Redirect to back with error message.

# **4.1.2** Client

Table 4.9: Select Map

UC-ID # 1		
Use Case Name: Se	Use Case Name: Select Map	
Primary Actor: Cli-	ent	
Pre-Condition:		
<ol> <li>Client m</li> </ol>	ust be logged in to the system.	
Post-Condition: 1. Client w	ill be able to select specific area on map.	
Main Scenario	Client initiates this use case by visiting orders module and add new order page.     System shows a map on right side of screen     Client can select his desired areas from map.	
Alternate	Redirect to back with error message.	

Table 4.10: Select Design

UC-ID # 2	
Use Case Name: Se	lect Design
Primary Actor: Cli	100 A 200 A
Pre-Condition: 1. Client m	ust be logged in to the system.
Post-Condition:	ill be able to select designs file.
Main Scenario	Client initiates this use case by clicking on client dashboard in order module.     System shows add new Order button.     Client clicks and a Add new order to Place New Order.
Alternate	Redirect to back with error message.

Table 4.11: Generate Quotation

UC-ID#3	
Use Case Name: Ge	enerate Quotation
Primary Actor: Cli	ent
Pre-Condition:	
	<ol> <li>Client must be login to the system.</li> </ol>
	<ol><li>Client must be fulfilling the data input fields</li></ol>
Post-Condition:	
	Client can generate the quotation
	<ol> <li>Client initiates this use case by visiting client-side dashboard.</li> </ol>
	<ol><li>System shows My Order tab</li></ol>
	<ol><li>Client clicks and a dropdown Place New Order.</li></ol>
Main Caspania	<ol> <li>System shows the input fields</li> </ol>
Main Scenario	<ol><li>Select media type</li></ol>
	6. Paper size
	<ol><li>Distribution Type</li></ol>
	8. Select map
	<ol><li>Upload File Attachments</li></ol>
	10. Number of copies
	11. Client fills all these input fields and press Print
	Quotation
	<ol><li>System prints a quotation to client.</li></ol>
Alternate	Redirect to back with error message.

Table 4.12: Place Order

UC-ID # 5	
Use Case Name: Pla	ace Order
Primary Actor: Cli	ent
Pre-Condition:	
	<ol> <li>Client must be login to the system.</li> </ol>
	<ol><li>Client must have placed an order.</li></ol>
Post-Condition:	
	<ol> <li>Client will give his order to B2Door Marketing.</li> </ol>
Main Scenario	Client initiates this use case by visiting client-side dashboard.
	<ol><li>System shows My Order tab</li></ol>
	<ol><li>Client clicks and a dropdown Place New Order.</li></ol>
	<ol> <li>System shows the input fields</li> </ol>
	<ol><li>Client fills all these input fields and press place order.</li></ol>
	<ol><li>System shows success message to client.</li></ol>
Alternate	Redirect to back with error message.

# Chapter 5: Implementation

# 5.1 IDE, Tools and Technologies

#### 5.1.1 Front-End:

- 1. HTML
- 2. CSS
- 3. Bootstrap
- 4. JavaScript
- 5. jQuery
- 6. FilePond
- 7. FlatPickr
- 8. Toastr

#### **5.1.2** Back-End:

- 1. Laravel
- 2. Yajra Data Table

#### 5.1.3 Database:

1. PostgreSQL

#### **5.1.4 Tools:**

- 1. VS Code
- 2. EdrawMax
- 3. Star UML
- 4. Git & GitHub
- 5. Figma

## 5.2 Best Practices / Coding Standard

- 1. Naming Conventions
- 2. Coding Standards
- 3. Error Handling
- 4. Optimization

Chapter 7:
Conclusion
& Outlook

#### 7.1 Introduction

We looked at every part of this project carefully, from the beginning to the happy ending. We checked what we did well, the improvements we made, and thought about how the project might grow in the future. The summary we're sharing here doesn't just highlight our successes, but also talks about the problems we fixed from past solutions. Along the way, we faced many tough situations and challenges. But, our strong passion and deep happiness for successfully finishing the project are clearly explained in this chapter.

## 5.2 Achievements and Improvements

The successful implementation of the "B2Door" project is a testament to our unwavering dedication and collaborative efforts. Throughout the journey, we encountered numerous challenges during the requirement gathering phase, development, and integration. However, our team demonstrated resilience and perseverance, ultimately overcoming these obstacles.

Despite facing fluctuations within the team, we remained focused on our goals and continually strived to work more efficiently within the allocated timeframe. In our quest for excellence, we extensively studied existing systems with similar features, allowing us to identify gaps and areas for improvement. Throughout the project, our dedicated project supervisor played a pivotal role, providing guidance and support from day one till the present. Their expertise and guidance proved instrumental in helping us accomplish our tasks and meet the project's objectives.

In conclusion, the B2Door project represents a remarkable achievement, driven by our collective determination, extensive learning, and implementation. We are proud of the results we have achieved and the impact our solution will have on addressing the needs of our target audience.

### 7.3 Critical Review

Our Project targets every level of business who want to expand it quickly. Our project will minimize their efforts which they put like they go manually outside and consume their time and resources. The system will help them and reduce their efforts. They can market their product or service in just few clicks.

## 7.4 Future Recommendations/Outlook

Looking forward, there are a few important suggestions for the future of the marketing Project. First, it's a good idea to keep learning about what customers like and what's new in the market. This can help make better plans for selling things and staying ahead of others. Second, it's important to use the internet and social media to tell more people about the products. Things like social media, making interesting content, and making sure the website shows up on search engines are important. Also, it's a good idea to make customers feel special by using their names and remembering what they like. This can make them want to keep buying things. Project's reach and credibility. By staying

adaptable and responsive to market changes, the marketing project can position itself for continued success in the dynamic business landscape.

# 7.5 Summary

The system operates seamlessly and demonstrates efficient performance in executing the tasks assigned by both the Admin and clients. It serves as a comprehensive platform that not only facilitates their connection but also fosters a bond of trust and confidence. At this juncture, the project is fully prepared to be utilized as a market-ready product or can be further developed into a thriving business startup.