



TRIBHUVAN UNIVERSITY
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
LALITPUR ENGINEERING COLLEGE

CODE CONNECT : CONNECT WITH CREATIVES

BY

SUSHANT BRAMHACHARYA (LEC077BCA08)

AMIT MAHARJAN (LEC077BCA01)

A PROJECT PROPOSAL

SUBMITTED TO THE DEPARTMENT OF COMPUTER APPLICATION
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE DEGREE OF BACHELORS IN COMPUTER APPLICATION

DEPARTMENT OF COMPUTER APPLICATION
LALITPUR, NEPAL

JUNE, 2023



Tribhuvan University
Faculty of Humanities and Social Sciences

CODE CONNECT : CONNECT WITH CREATIVES

Submitted to
Department of Computer Application
Lalitpur Engineering College

In partial fulfillment of the requirement for the degree of Bachelors in
Computer Application

Submitted by
Sushant Bramhacharya (LEC077BCA08)
Amit Maharjan (LEC077BCA01)

JUNE, 2023

Under the Supervision of
Er. Bisikha Subedi

COPYRIGHT ©

The author has agreed that the library, Department of Computer Application, Faculty of Humanities and Social Sciences, Lalitpur Engineering College, may make this project work freely available for inspection. Moreover the author has agreed that the permission for extensive copying of this project work for scholarly purpose may be granted by the professor(s), who supervised the project work recorded herein or, in their absence, by the Head of the Department, wherein this project work was done. It is understood that the recognition will be given to the author of this project work and to the Department of Computer Application, Faculty of Humanities and Social Sciences, Lalitpur Engineering College in any use of the material of this project work. Copying of publication or other use of this project work for financial gain without approval of the Department of Computer Application, Faculty of Humanities and Social Sciences, Lalitpur Engineering College and author's written permission is prohibited.

Request for permission to copy or to make any use of the material in this thesis in whole or part should be addressed to:

Head

Department of Computer Application

Faculty of Humanities and Social Sciences, Lalitpur Engineering College

Patan, Lalitpur, Nepal

DECLARATION

I declare that the work hereby submitted for Bachelors in Computer Application at the Department of Computer Application, Lalitpur Engineering College entitled **”Code Connect : Connect with Creatives”** is my own work and has not been previously submitted by me at any university for any academic award. I authorize the Department of Computer Application, Lalitpur Engineering College to lend this project work to other institutions or individuals for the purpose of scholarly research.

Sushant Bramhacharya (LEC077BCA08)

Amit Maharjan (LEC077BCA01)

June, 2023

RECOMMENDATION

The undersigned certify that they have read and recommend to the Department of Computer Application for acceptance, a project work entitled “**Code Connect : Connect with Creatives**”, submitted by **Sushant Bramhacharya (LEC077BCA08) and Amit Maharjan (LEC077BCA01)** in partial fulfillment of the requirement for the award of the degree of “**Bachelors in Computer Application**”.

Project Supervisor

Er. Bisikha Subedi

Lecturer

Department of Computer Application, Lalitpur Engineering College

BCA Program Coordinator

Er. Bibat Thokar

Lecturer

Department of Computer Application, Lalitpur Engineering College

June, 2023

DEPARTMENTAL ACCEPTANCE

The project work entitled “**Code Connect : Connect with Creatives**”, submitted by **Sushant Bramhacharya (LEC077BCA08) and Amit Maharjan (LEC077BCA01)** in partial fulfillment of the requirement for the award of the degree of “**Bachelors of Computer Application**” has been accepted as a genuine record of work independently carried out by the student in the department.

Er.Bibat Thokar

BCA Coordinator

Department of Computer Application,

Lalitpur Engineering College,

Faculty of Humanities and Social Sciences,

Tribhuvan University, Nepal.

June, 2023

ACKNOWLEDGMENT

This project work would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

First of all, I would like to express my sincere gratitude to my supervisor, **Er. Bisikha Subedi**, of (**Organization**) for providing invaluable guidance, insightful comments, meticulous suggestions, and encouragement throughout the duration of this project work. My sincere thanks also goes to the BCA coordinator, **Er. Bibat Thokar**, for coordinating the project works, providing astute criticism, and having inexhaustible patience.

[Include a few lines of appreciation if assistance was received from organizations or individuals other than the supervisor]

I am also grateful to my classmates and friends for offering me advice and moral support. To my family, thank you for encouraging me in all of my pursuits and inspiring me to follow my dreams. I am especially grateful to my parents, who supported me emotionally, believed in me and wanted the best for me.

Sushant Bramhacharya (LEC077BCA08)

Amit Maharjan (LEC077BCA01)

June, 2023

ABSTRACT

Code Connect is a revolutionary social media platform made specifically to the needs of programmers and developers. With a focus on collaboration, knowledge sharing, and networking, Code Connect serves as an interactive space where programmers can connect with like-minded individuals, exchange ideas, and explore new opportunities within the coding community. The platform offers a user-friendly interface and a range of features designed to enhance the programmer's experience. Users can create personalized profiles to showcase their skills, experiences, and projects, attracting potential collaborators or employers. A comprehensive search and recommendation system allows users to discover discussions tailored to their interests and preferences.

One of Code Connect's unique strengths is Messaging system. Real-time messaging facilitates productive discussions and timely feedback among peers. Furthermore, Code Connect encourages the sharing of code snippets, problems, and open-source projects. Users can publish their code, receive feedback, and collaborate on improvements, building a valuable repository of shared resources accessible to the entire coding community.

In conclusion, Code Connect is a vital platform that connects programmers, fosters collaboration, and facilitates growth within the coding community. By empowering programmers to share knowledge, explore opportunities, and connect with peers, Code Connect aims to advance the programming industry as a whole both for newcomers and advanced ones.

Keywords: Connection, Customized Profile, Discussion and Messaging

TABLE OF CONTENTS

COPYRIGHT	iii
DECLARATION.....	iv
RECOMMENDATION.....	v
DEPARTMENTAL ACCEPTANCE.....	vi
ACKNOWLEDGMENT.....	vii
ABSTRACT	viii
TABLE OF CONTENTS	ix
LIST OF FIGURES	xi
LIST OF TABLES	xii
LIST OF ABBREVIATIONS	xiii
1 INTRODUCTION	1
1.1 Introduction	1
1.2 Problem Statement.....	1
1.3 Objectives	1
1.4 Scope	2
1.5 Report Organisation	2
2 BACKGROUND AND LITERATURE REVIEW.....	3
2.1 Background Study	3
2.2 Literature Review.....	3
3 METHODOLOGY	6
3.1 System Development Approach	6
3.2 Requirement Analysis	6
3.3 Feasibility Analysis.....	6
3.3.1 Economical Feasibility	6
3.3.2 Operational Feasibility	7
3.3.3 Technical Feasibility	7
3.4 System Design	8

3.4.1	Architecture Design	8
3.4.2	Data Modelling(ER-Diagram)	9
3.4.3	Activity Diagram	10
3.4.4	DFD	11
3.4.5	Use Case Diagram	12
4	IMPLEMENTATION	13
4.1	Tools Used	13
5	Conclusion and Future Recommendations	15
5.1	Lesson Learnt/Outcome	15
5.2	Conclusion	15
5.3	Future Recommendations	15
APPENDIX A		
A.1	Project Schedule	16
A.2	Remaining Part	16
REFERENCES		17

LIST OF FIGURES

Figure 3.1	Main Architecture of System	8
Figure 3.2	ER Diagram of System Data	9
Figure 3.3	Activity Diagram.....	10
Figure 3.4	Data Flow Diagram (Context Level)	11
Figure 3.5	Use Case Diagram	12
Figure A.1	Gantt Chart of Schedule	16

LIST OF TABLES

LIST OF ABBREVIATIONS

Must be in Lexicographical Order

AR	Augmented Reality
BFMRDS	Burke-Fahn-Marsden Dystonia Rating Scale
CNN	Convolutional Neural Network
CT	Computed Tomography
DWI	Diffusion-weighted Imaging
GDI	Gini's Diversity index
GDS	Global Dystonia Severity Rating Scale
GPU	Graphics processing unit
HOG	Histogram of Oriented Gradients
IR	Infrared
JRS	Jankovic Rating Scale
LED	Light Emitting Diode.
LID	Levodopa-induced Dyskinesia
ML	Machine Learning
MRI	Magnetic Resonance Imaging
PD	Parkinson's Disease
PET	Positron Emission Tomography
PSF	Pictorial Structure Framework
RCNN	Region-Based Convolutional Neural Network
TWSTRS	Toronto Western Spasmodic Torticollis Rating Scale
URDS	Unified Dystonia Rating Scale

1 INTRODUCTION

1.1 Introduction

Code Connect is a social media platform for IT professionals. It was created to address the lack of specific features for IT professionals on existing social media platforms. Code Connect offers a dedicated space for IT professionals to connect, collaborate, and access valuable resources.

1.2 Problem Statement

There are many general social media platforms available, but none of them are specifically designed for IT professionals. This means that IT professionals often have to use general platforms, which can be less effective for networking and collaboration. Most general social media platforms do not have dedicated spaces for IT professionals to share their resumes. This can make it difficult for IT professionals to get their resumes seen by potential employers. There are no specific resume management tools available for IT professionals. This means that IT professionals often have to use general resume management tools, which can be less effective for managing IT-related resumes.

There is no specific portfolio management tool available for IT professionals. This means that IT professionals often have to use general portfolio management tools, which can be less effective for managing IT-related portfolios. IT professionals are often underrepresented in other social media platforms. This can make it difficult for IT professionals to reach a wider audience and connect with other IT professionals. The challenges listed above can be even more difficult for new aspiring IT professionals. This is because new IT professionals may not have the same level of experience or connections as more experienced IT professionals.

1.3 Objectives

- Create a social media having normal functionalities and extra specifically for programmers.

1.4 Scope

The app should provide a space for IT professionals to network with each other. This could be done through discussions or Messaging. Networking can help IT professionals to discover jobs, learn new skills, and stay up-to-date on the latest trends. The app should make it easy for new comers in field of IT. The app should offer a nice way to showcase their skill and projects. The app should have code snippets sharing and discussion. The app should have connection functions for connecting between peers, friends and seniors.

1.5 Report Organisation

The material in this project report is organised into seven chapters. After this introductory chapter introduces the problem topic this research tries to address, chapter 2 contains the literature review of vital and relevant publications, pointing toward a notable research gap. Chapter 3 describes the methodology for the implementation of this project. Chapter 4 provides an overview of what has been accomplished. Chapter 5 contains some crucial discussions on the used model and methods. Chapter 6 mentions pathways for future research direction for the same problem or in the same domain. Chapter 7 concludes the project shortly, mentioning the accomplishment and comparing it with the main objectives.

2 BACKGROUND AND LITERATURE REVIEW

2.1 Background Study

We are looking for designs that make our system visually appealing and at the same time have better performance. As this system is mainly for creatives who can share their journey, we need to implement a profile system that shows off their portfolio and resume. Showcasing their skills should be easy so this system mainly focuses on functionalities implementations. We are looking for different tools and techniques for achieving those goals. We are also studying papers, articles, and related books for our project. We are also learning about implementation about messaging system. The proposed project is to create an app for programmers where they can share their discussions, projects, skills, and perform messaging functions. To develop this app, it is important to understand code collaboration, tools for code sharing, and messaging functions.

2.2 Literature Review

Social networks are like groups of people who know each other and interact with each other. The technology helps us study how people are connected to each other and how they talk to each other online. It also helps us understand the things they say and the information they share.[1]

In today's competitive job market, organizations strive to identify and attract top talent, and this research investigates the influence of social media on the recruitment process. With the rapid growth of social media usage, it is crucial for organizations to understand effective strategies for attracting the best candidates. The study involved 12 recruiters from various industries, and the findings reveal heavy reliance on platforms like LinkedIn for recruitment purposes. However, the use of Twitter and Facebook for recruitment is comparatively lower. Recruiters need a focused approach when utilizing social media to manage the potential overwhelming volume of work. It is evident that recruiters cannot effectively conduct recruitment activities without leveraging social media tools, but proper training in optimizing social media usage is essential. This study contributes to highlighting the significant impact of

LinkedIn on recruitment processes, while also emphasizing that social media is not a one-size-fits-all solution for recruitment challenges.[2]

In Stack Overflow, A complete profile includes details such as a website URL, location, about me section, profile image, and age. Our analysis revealed that most users do not have a complete profile. However, users with complete profiles tend to have higher reputation scores and provide better quality question and answer posts compared to users with incomplete profiles. This suggests that having a complete profile is beneficial for contributing effectively to the network. Among the profile elements we examined, location and about me have a stronger relationship with user activity and contribution. This research helps us understand which profile elements are important in a Q and A social network and which ones should be prioritized for users to fill out regularly.[3]

We examine the characteristics of developers involved in Open Source software creation to understand what factors contribute to innovation within the Open Source community. The analysis reveals that having a higher reputation within the community increases the likelihood of attracting collaborators, although developers are also motivated by reciprocity, aligning with the principles of a gift economy. Additionally, we find a significant network effect resulting from standardization, indicating that developers who use popular programming languages in their projects are more likely to collaborate with others. Furthermore, providing additional information, such as a valid URL to the developer's homepage, increases the chances of finding coworkers. These findings can be applied to the broader population of experienced users on platforms like GitHub.[4]

GitHub has recently introduced a new feature called Discussions, which serves as a platform for developers to ask questions and engage in broader discussions that go beyond specific Issues. Before its widespread availability in December 2020, Discussions underwent testing on selected open source software projects. In order to

gain insights into developers' utilization of this innovative feature, their perceptions of it, and its impact on the software development process, we conducted a comprehensive mixed-methods study involving early adopters of GitHub discussions between January and July 2020. Developers perceive GitHub Discussions as a valuable tool; however, they encounter challenges related to topic duplication between Discussions and Issues. This issue poses a concern, as it leads to confusion and redundancy in communication.[5]

3 METHODOLOGY

3.1 System Development Approach

An incremental approach, also known as an iterative or step-by-step approach, is a development or problem-solving method that breaks down a larger task or project into smaller, manageable increments or steps. Rather than attempting to tackle the entire task at once, an incremental approach focuses on making incremental progress by completing and delivering smaller portions of work in a series of iterations.

- Initial Planning and Requirements Gathering
- Increment Planning and Design
- Development and Implementation
- Testing and Quality Assurance
- Evaluation and Feedback
- Iterative Development and Refinement
- Deployment and Release
- Repeat the Process for Subsequent Increments

3.2 Requirement Analysis

3.3 Feasibility Analysis

A feasibility study is a systematic and structured analysis conducted to determine the viability and practicality of a proposed project plan. It serves as an evaluation tool to assess whether the project can be successfully implemented and if it aligns with the organization's goals and objectives. It involves gathering and analyzing relevant information to determine if the project is technically feasible, operationally feasible, economically feasible, and scheduling feasible.

3.3.1 Economical Feasibility

Since the proposed system has a web application, we will be using free and open-source software development tools such as HTML,CSS,JS, PHP, MySQL and Figma.

We will only need some economy for server for hosting.

3.3.2 Operational Feasibility

Operational feasibility for the proposed system focuses ease of use. As the system is designed to be interactive, users do not require in-depth knowledge of the mobile app to navigate and utilize its features. The user interface (UI) is specifically designed to be user-friendly, ensuring a smooth and intuitive experience. This approach minimizes the need for extensive training and reduces potential resistance from users.

3.3.3 Technical Feasibility

There are several development technologies available. For frontend development, we have HTML,CSS,JS. For backend development, we have PHP along with the MySQL database. In our application, we have utilized HTML,CSS,JS, for the frontend and PHP with MySQL for the backend. Both HTML,CSS,JS, and PHP are open-source technologies and are supported by large companies with vibrant communities. This ensures that technical support and resources are readily available. Considering the chosen technologies and their strong community backing, the project is technically feasible.

3.4 System Design

3.4.1 Architecture Design

The following diagram shows diagram of our Architecture. Mainly shows what are the functions can be accessed after starting our application.

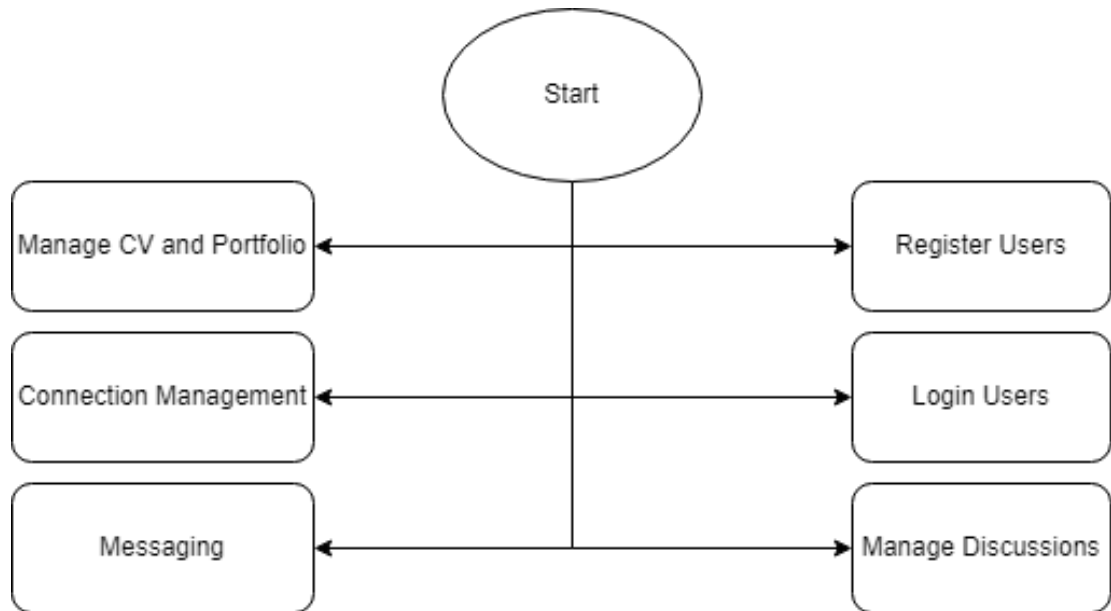


Figure 3.1: Main Architecture of System

3.4.2 Data Modelling(ER-Diagram)

ER Diagram is mainly used to design database schema. With the help of below er diagram we can easily design database in SQL.

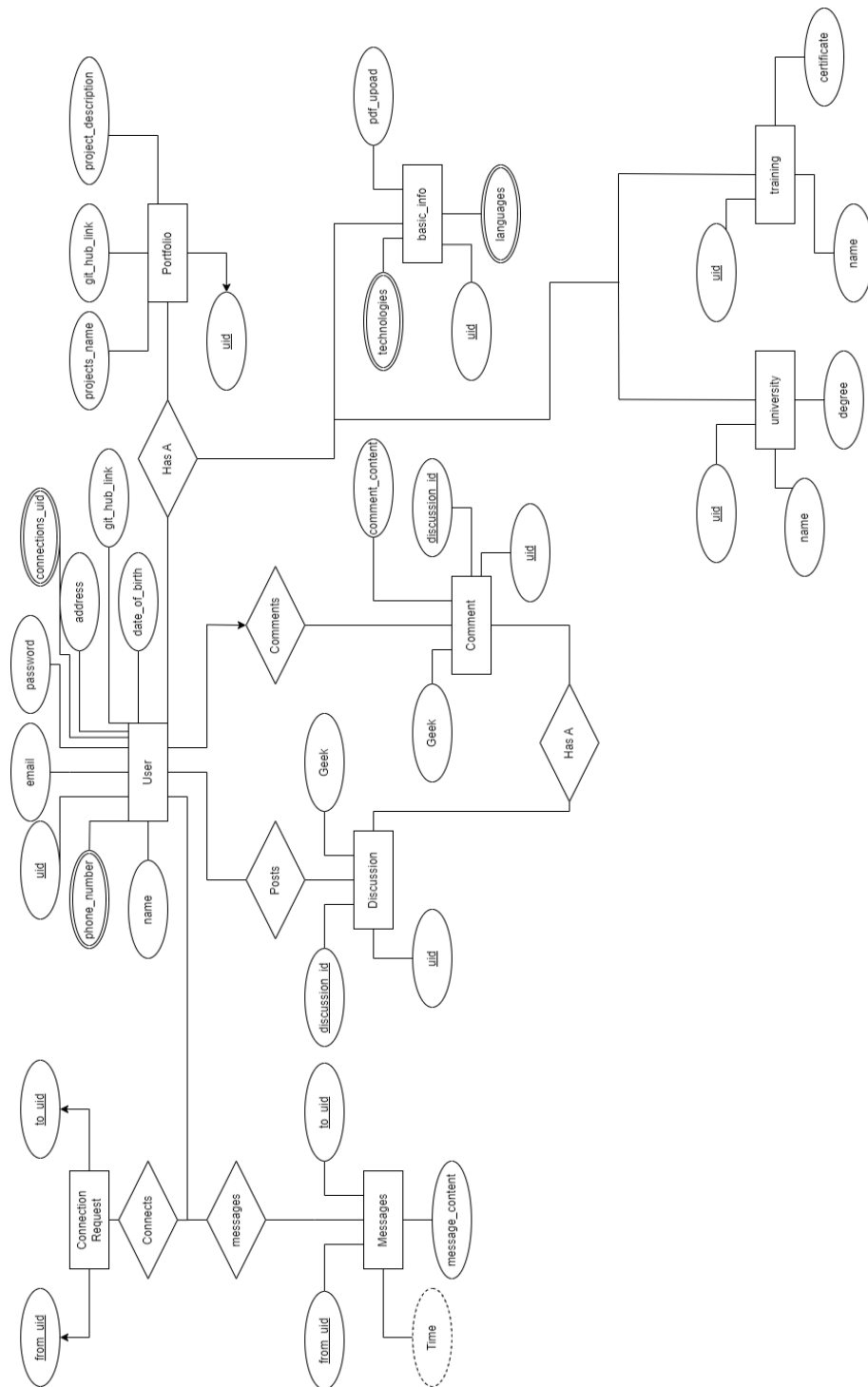


Figure 3.2: ER Diagram of System Data

3.4.3 Activity Diagram

An activity diagram visually presents a series of actions or flow of control in a system similar to a flowchart or a data flow diagram. This diagram showed how our program flow goes on.

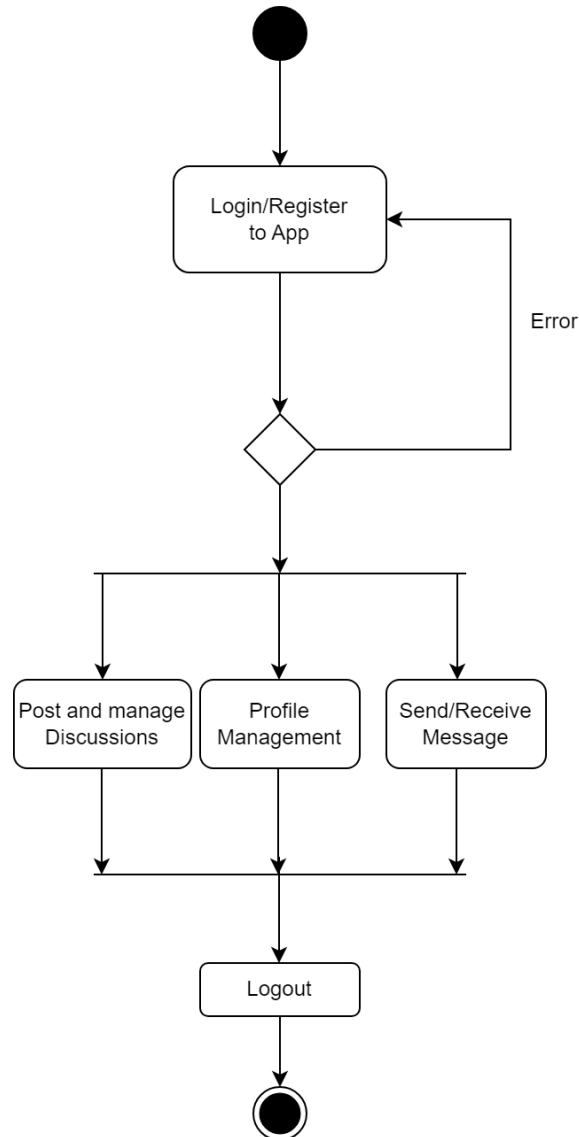


Figure 3.3: Activity Diagram

3.4.4 DFD

DFD or Data Flow Diagram is mainly used to show how data are being flowed in and out of our system. There are 3 levels of DFD i.e Context Level(Level 0),Level 1 and Level 2

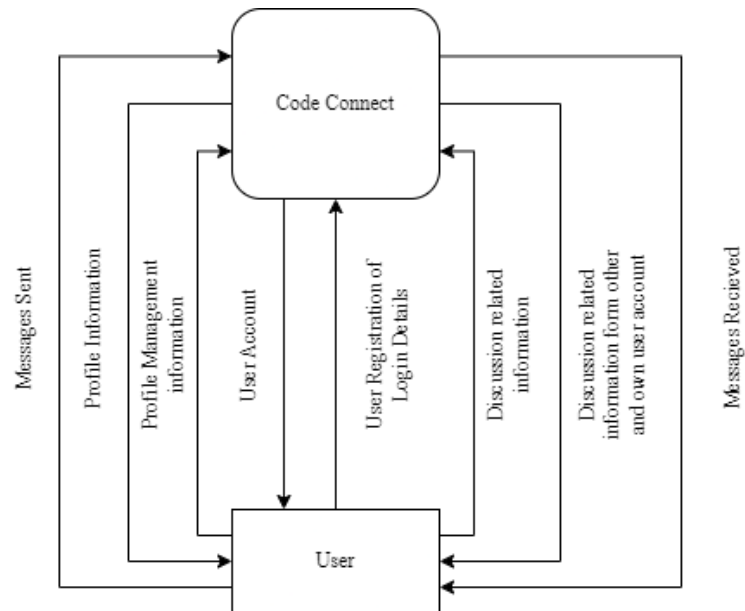


Figure 3.4: Data Flow Diagram (Context Level)

3.4.5 Use Case Diagram

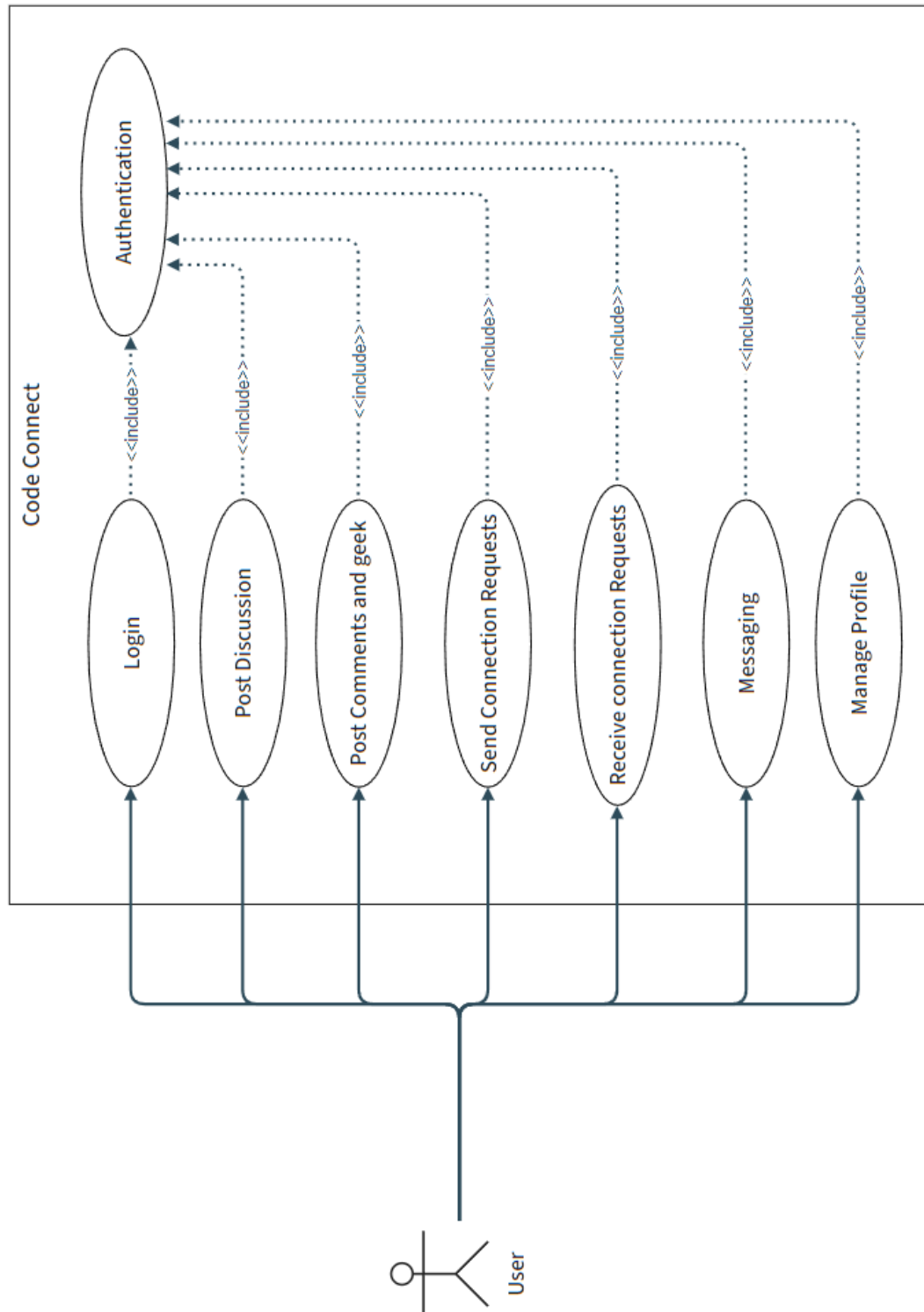


Figure 3.5: Use Case Diagram

4 IMPLEMENTATION

4.1 Tools Used

Figma

Figma is a cloud-based design and prototyping tool that empowers teams to collaborate on UI/UX design projects in real-time. It offers a user-friendly interface and powerful features that make it a popular choice among designers. With Figma, designers can create and share interactive prototypes, design components, and design systems. Its cloud-based nature allows for seamless collaboration, enabling multiple team members to work on the same design simultaneously. Figma supports version control, ensuring that design iterations can be easily tracked and managed.

HTML/CSS

HTML and CSS are two of the most important languages for creating web pages. HTML stands for HyperText Markup Language, and it is used to structure the content of a web page. CSS stands for Cascading Style Sheets, and it is used to control the appearance of a web page. HTML is a markup language, which means that it is used to mark up text with tags. These tags tell the web browser how to display the text. For example, the h1 tag tells the web browser to display the text as a heading, while the p tag tells the web browser to display the text as a paragraph. CSS is a style sheet language, which means that it is used to define styles for HTML elements. These styles can control the font, size, color, and other properties of HTML elements.

MySQL

MySQL is a robust relational database management system that offers a range of features for efficient data storage and retrieval. It supports transactions with ACID properties, ensuring Atomicity, Consistency, Isolation, and Durability. MySQL provides essential capabilities such as automatically updatable views, triggers, foreign keys, and stored procedures, allowing for complex data manipulation and logic implementation. It is compatible with various operating systems, including Windows, Linux, macOS, FreeBSD, and OpenBSD.

Git/Github

Git is a distributed version control system that is both free and open-source, designed

to handle projects of all sizes efficiently and swiftly. It simplifies collaboration by enabling multiple individuals to contribute changes that can be seamlessly merged into a single source. When using Git, the software runs locally on your computer, storing your files and their complete history. Alternatively, you can utilize online hosts like GitHub to store a copy of your files and their revision history. This central repository allows you to easily upload your changes and download updates from other developers, promoting seamless collaboration. Git facilitates automatic merging of changes, allowing multiple individuals to work on different sections of the same file and later merge their modifications without losing any work.

PHP

PHP is a server-side scripting language that is used to create dynamic and interactive web pages. It is a free and open-source language that is widely used by web developers. PHP can be used to process form data, generate dynamic content, and connect to databases. It is also used to create content management systems (CMS) and e-commerce platforms. PHP is a powerful and flexible language that is easy to learn and use. It is a great choice for web developers who want to create dynamic and interactive web pages.

JavaScript

JavaScript is a client-side scripting language that is used to create interactive web pages. It is a powerful and versatile language that can be used to do a wide variety of things, including adding animation and interactivity to web pages, validating form data, processing user input, making Ajax requests to the server, and creating games and other interactive applications.

React .js

React.js is a widely-used JavaScript library for creating efficient and reusable user interfaces. It offers a component-based architecture, virtual DOM for improved performance, and supports declarative programming. With a rich ecosystem of libraries and tools, React.js enables developers to build dynamic and responsive applications for both single-page and server-side rendering.

5 Conclusion and Future Recommendations

5.1 Lesson Learnt/Outcome

5.2 Conclusion

5.3 Future Recommendations

Conclusion: (1 Page)

- a. Summarize the key supporting ideas discussed throughout the project
- b. Relate back to the project objectives and discuss about their fulfillment
- c. Offer final impression on the project's central idea

This initiative aimed to solve the following research question:

This project has contributed to the area of . . . in the following ways to achieve the goal:

- ...
- ...
- ...

With the above contributions, this project has shown high hopes . . .

APPENDIX A

A.1 Project Schedule

Below is the Gantt chart of our project Schedule. We have planned to perform these specific tasks between these time frames.







PROCESS	2023					
	April	May	June	July	August	September
Requirement Gathering						
Designing						
Coding						
Testing						
Documentation						
Maintenance						

Figure A.1: Gantt Chart of Schedule

A.2 Remaining Part

REFERENCES

- [1] Anton Korshunov, Ivan Beloborodov, Nazar Buzun, Valeriy Avanesov, Roman Pastukhov, Kyrylo Chykhhradze, Ilya Kozlov, Andrey Gomzin, Ivan Andrianov, Andrey Sysoev, et al. Social network analysis: methods and applications. *Proceedings of the Institute for System Programming of the RAS (Proceedings of ISP RAS)*, 26(1):439–456, 2014.
- [2] Tanja Koch, Charlene Gerber, and Jeremias J De Klerk. The impact of social media on recruitment: Are you linkedin? *SA Journal of Human Resource Management*, 16(1):1–14, 2018.
- [3] Ifeoma Adaji and Julita Vassileva. Towards understanding user participation in stack overflow using profile data. In *Social Informatics: 8th International Conference, SocInfo 2016, Bellevue, WA, USA, November 11-14, 2016, Proceedings, Part II* 8, pages 3–13. Springer, 2016.
- [4] Dorota Celińska. Coding together in a social network: collaboration among github users. In *Proceedings of the 9th international conference on social media and society*, pages 31–40, 2018.
- [5] Hideaki Hata, Nicole Novielli, Sebastian Baltes, Raula Gaikovina Kula, and Christoph Treude. Github discussions: An exploratory study of early adoption. *Empirical Software Engineering*, 27:1–32, 2022.