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Web-Application on CV-Building

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Web-Application on CV-Building

By

Tahsin Bin Khaled

Student ID: **1830422**

Summer, 2023

Supervisor:

Md Abu Sayed

Lecturer

Department of Computer Science & Engineering

Independent University, Bangladesh

October 18, 2023

Dissertation submitted in partial fulfillment for the degree of Bachelor of Science in Computer Science

Department of Computer Science & Engineering

Independent University, Bangladesh

Attestation

I,Tahsin Bin Khaled, affirm the integrity and accuracy of the academic report titled "Cv-Building Website." This document represents my independent research and scholarly work.
I confirm that all sources used are properly cited, and this report adheres to academic integrity standards, reflecting my commitment to scholarly honesty.



Signature

18/10/23

Date

Tahsin Bin Khaled

Name

Acknowledgement

I commence with profound gratitude to the Almighty Allah, whose benevolence has endowed me with the fortitude, diligence, and capability to labor assiduously, thereby facilitating the composition of this report. Additionally, I am deeply appreciative of the privilege bestowed upon me to undertake my internship at Softograph Ltd.

I extend my most sincere appreciation to my esteemed faculty member and mentor, Md. Abu Sayed, who serves as a Lecturer in the Department of Computer Science and Engineering at Independent University Bangladesh. His invaluable guidance, unwavering patience, generous allocation of time, constructive critique, and sagacious counsel, throughout the entirety of my internship and the preparation of this report, have been a source of profound enlightenment and are profoundly cherished.

Furthermore, I wish to convey my gratitude to Hasnain Bin Khaled, the Chief Operating Officer, for affording me the invaluable opportunity to complete my internship at Softograph Ltd. His steadfast guidance and unwavering support during this period have been instrumental to my growth and development.
The knowledge and experiential insights I have gleaned during the course of this internship have proven to be of immeasurable value, as they equip me with a robust foundation for the forthcoming phase of my professional journey.

Letter of Transmittal

05 October 2023
Md. Abu Sayed
Lecturer
Department of Computer Science and Engineering
Independent University Bangladesh

Subject: Letter of Submission for Internship Report, 2023

I, Tahsin Bin Khaled, with the utmost respect, hereby formally submit my internship report, titled "CV-Building Website," as a mandatory component for successfully concluding my internship at Softograph Ltd during the summer of 2023. This report signifies the culmination of three months, encompassing the knowledge and experiences I have acquired during my tenure at Softograph Ltd.

The primary objective of my internship was to gain practical exposure to various technological aspects within the company, such as research, development, documentation, and website creation, with a special emphasis on comprehending the process of building a website.

Throughout my internship at Softograph Ltd, I had the opportunity to acquire and put into practice numerous new skills and technologies. I am deeply grateful for your invaluable guidance and unwavering support throughout this journey. I sincerely hope that this report meets all the requirements and lives up to your expectations. Thank you for dedicating your time and consideration to this submission.

Sincerely,

Tahsin Bin Khaled
1830422
Email : 1830422@iub.edu.bd

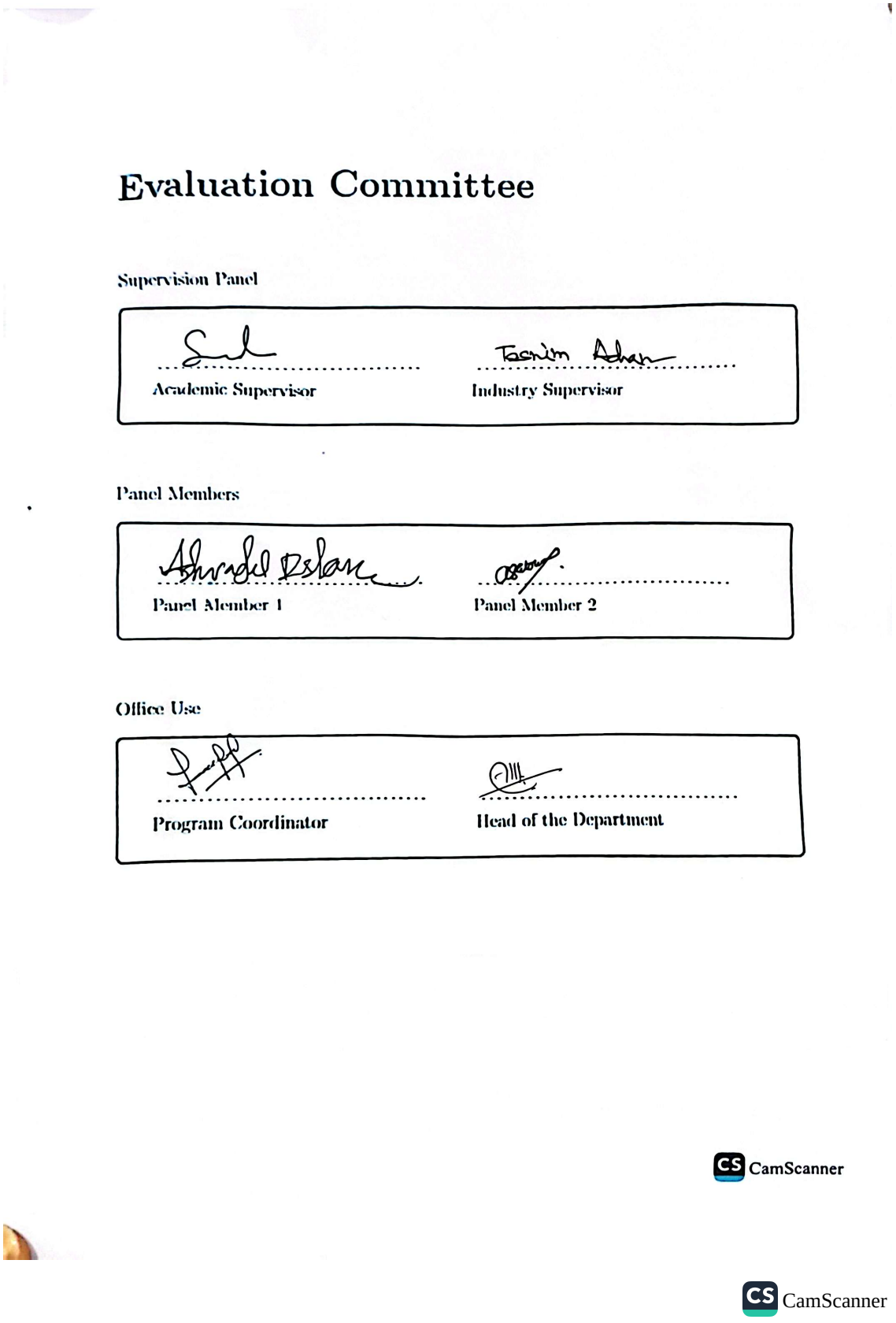

Figure 1: Caption

Abstract

In the rapidly evolving and competitive job market, an effective and exquisite Curriculum Vitae (CV) is essential for individuals to stand out. Traditional CV creation methods often lack the interactivity and proactive features needed to make an impression on potential employers for a considerable amount of time.
This academic report presents a research proposal to develop a web-based CV- building platform using ReactJS and the MERN (MongoDB, Express.js, ReactJS, Node.js) stack. The platform's goal is to offer users a versatile and user-friendly interface to create personalized and visually impressive CVs, enhancing their capacity for work. The report encompasses a comprehensive problem statement, literature review, and proposed methodology. The report begins with a problem statement, followed by a comprehensive literature review that explores relevant topics such as CV-building platforms and web technologies.

Keywords— MERN stack (MongoDB, Express.js, ReactJS, Node.js), Web-based platform, Versatile

Contents

Attestation i

Acknowledgement ii

Letter of Transmittal iii

Evaluation Committee iii

Abstract v

1 Introduction 1

1.1 Overview/Background of the Work 1

1.2 Objectives 1

1.3 Scopes 2

2 Literature Review 3

2.1 Relationship with Undergraduate Studies 3

2.2 Related works 3

3 Project Management & Financing 5

3.1 Work Breakdown Structure 5

3.2 Process/Activity wise Time Distribution 5

3.3 Gantt Chart 6

3.4 Process/Activity wise Resource Allocation 6

3.5 Estimated Costing 6

4 Methodology 7

5 Body of the Project 9

5.1 Work Description 9

5.2 Requirement Analysis 9

5.3 System Analysis 11

5.3.1 Six Element Analysis 11

5.3.2 Feasibility Analysis 11
5.3.3 Problem Solution Analysis 12
5.3.4 Effect and Constraints Analysis 12
5.4 System Design 13
5.5 Implementation 15
5.6 Testing 18

6 Results & Analysis **20**

7 Project as Engineering Problem Analysis **22**
7.1 Sustainability of the Project/Work 22
7.2 Social and Environmental Effects and Analysis 22
7.3 Addressing Ethics and Ethical Issues 23

8 Lesson Learned **24**
8.1 Problems Faced During this Period 24
8.2 Solution of those Problems 25

9 Future Work & Conclusion **27**
9.1 Future Works 27
9.2 Conclusion 28

Bibliography **29**

List of Figures

1 Caption iv

3.1 WBS 5
3.2 Process/Activity wise Time Distribution 5
3.3 Gantt Chart 6
3.4 Process/Activity wise Resource Allocation 6
3.5 Estimated Costing 6

4.1 Methodology 8

5.1 System analysis chart 10
5.2 Functional Requirements 10
5.3 Non-Functional Requirements 11
5.4 Six Element Analysis 11
5.5 Use Case Diagram 13
5.6 Landing Page 15
5.7 Landing Page About Us 15
5.8 Landing Page Contact Us 15
5.9 Sign Up Page 16
5.10 User Home Page 16
5.11 User Personal Information 17
5.12 User Skill and Education 17
5.13 User Experience and Project 17
5.14 Print Image 18
5.15 Testing Input 18
5.16 Testing Output 19

9.1 Caption 30

List of Tables

Table 3.1 Task-wise time allocation
Table. 3.4 Estimates Cost Table
Table. 5.3.2 Functional Requirements Table
Table. 5.3.2 Non-Functional Requirements Table
Table. 5.3.1 System Analysis Table
Table. 5.6.1 Testing Input
Table. 5.6.2 Testing Input
Table. 5.6.3 Testing Output

Chapter 1

Introduction

1.1 Overview/Background of the Work

In today's competitive job market, creating a professional resume, or CV can be a complex and time-consuming task. The CV-Builder project was developed to simplify this process. It offers a user-friendly platform that automates CV creation, reducing the time and effort required. The project includes pre-designed CV templates for various industries and aims to enhance the overall job-seeking experience by making it easier for users to showcase their qualifications effectively. Leveraging modern web technologies, the CV-Builder project empowers users to craft impressive CV's efficiently.

1.2 Objectives

The primary objective of the CV-Builder project is to revolutionize the way individuals create and present their resumes (CVs) in today's highly competitive job market. This project aims to simplify the CV creation process, making it accessible and efficient for users of all technical backgrounds.

- Users can sign up and sign in.
- Users can see their profile and information
- Users can add their information on this website which will be added to the database to keep the information saved for future
- Users can add as much information as they wish as the information taken by the site is dynamic.
- Users can add Personal Information, Skills and Experience and can update their information accordingly

- Users can choose professional templates from the given options
- Users can preview and print their Curriculum Vitae from the site directly

1.3 Scopes

- Home or Landing page for non-registered and registered users.
- Sign in and Sign up pages
- Users will be able to create and manage their personal profiles.
- Users will have the option to select a template that suits their needs.
- Users will have the convenience of printing their completed CVs directly from the platform.

Chapter 2

Literature Review

2.1 Relationship with Undergraduate Studies

List of courses that helped in the development process:
CSE 203 - Data Structures: This foundational course ushered me into the realm of various data structures and their pragmatic applications.
CSE 303 - Database Management: Marking my maiden foray into project design and strategic schematics, this course introduced me to the architectural intricacies of relational database design, proving indispensable in shaping the database framework for ensuing projects.
CSE 213 - Object-Oriented Programming: In the dynamic crucible of the industry, an emphasis was placed on object-oriented programming paradigms. This course enlightened me on the art of crafting modular code, mitigating redundancy, and elevating code reusability.
CSE 309 - Web Application and Internet: Within the crucible of this course, I garnered a profound understanding of application development, encompassing the coveted realms of HTML, CSS, and ReactJs. The knowledge and instrumental proficiency honed in this domain notably expedited my assimilation of ReactJs for web development endeavors

2.2 Related works

In the landscape of online CV creation solutions, numerous platforms and projects have contributed to simplifying and improving the process of crafting professional resumes. These platforms serve as valuable references for the CV-Builder project, offering insights into best practices and features that can be incorporated to create a competitive and user-friendly application.

- LinkedIn :
  LinkedIn Resume Builder retrieved from `https://www.linkedin.com`

A wide selection of templates created to various career stages

- Canva:
  Canva Pty Ltd. retrieved from `https://play.google.com/store/apps/details?id=com.canva.editor`
  A diverse range of customizable CV templates with design elements.

- Resume.io:
  Resume Builder [Mobile application software]. Retrieved from `https://apps.apple.com/us/app/resume-io-resume-builder/id1605087681`
  Straightforward template selection and editing process.

Chapter 3

Project Management & Financing

3.1 Work Breakdown Structure

CV- Building Website is the name of my project. We have created a Work Breakdown Structure (WBS) where we broke down the project into smaller segments so that the work is coordinated and more manageable. We have used the Top-down approach here

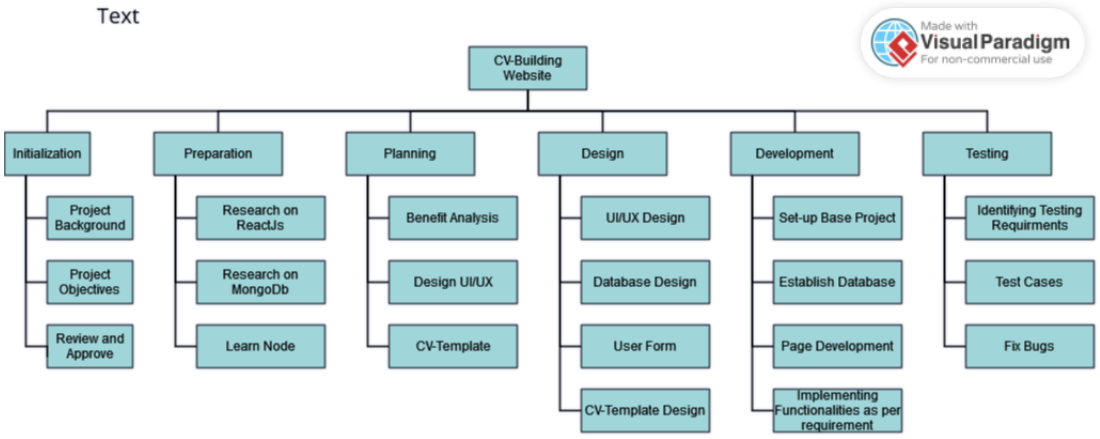

Figure 3.1: WBS

3.2 Process/Activity wise Time Distribution

Task	Days	Work Percentage (%)
Initializing (Learning Phase)	21	26
Requirement Analysis	4	5
Planning	2	2
Design	3	4
Implementation	51	63
TOTAL	81	100

Figure 3.2: Process/Activity wise Time Distribution

3.3 Gantt Chart



Figure 3.3: Gantt Chart

3.4 Process/Activity wise Resource Allocation

For each part shown in the WBS Diagram, we allocated a certain amount of time as required to complete the Task.

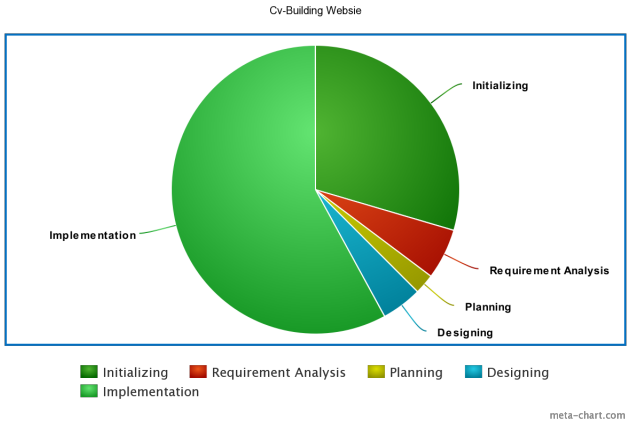

Figure 3.4: Process/Activity wise Resource Allocation

3.5 Estimated Costing

Item	Days	Cost
Requirement Analysis	4	699
Training and Planning	25	2533
Front-End Develomen	30	6757
Backend	21	2796
Total Cost		12785

Figure 3.5: Estimated Costing

Chapter 4

Methodology

To develop any project, it is important to follow the right steps. It is highly unlikely to finish a large project at once without risk of failure. It is better to break the project's work into small milestones to simplify the design process.

- Planning: The project begins with a comprehensive plan according to established requirements.
- Project Setup:

  Creating a react-app project and installing the necessary tools like npm, Node.js, MongoDB, and relevant packages.
- Design and Layout:

  After the user signing up and sign in, the user gets to update information in Personal Information, Education, Skills, Work, etc. Updating the information, the user will automatically be directed to the template page, where the website allows to choose templates from.
- Front-end Development(React.js)

  Front-end implemented with React.js. Reuse-able parts such as the layout of the navbar are set as components for better maintainability. React Router is set up for handling different pages. Protected routes are also created for Signed Up users only.
- CV Generation

  Logically generated CV dynamically based on the user's given information. React components used to display CV content.

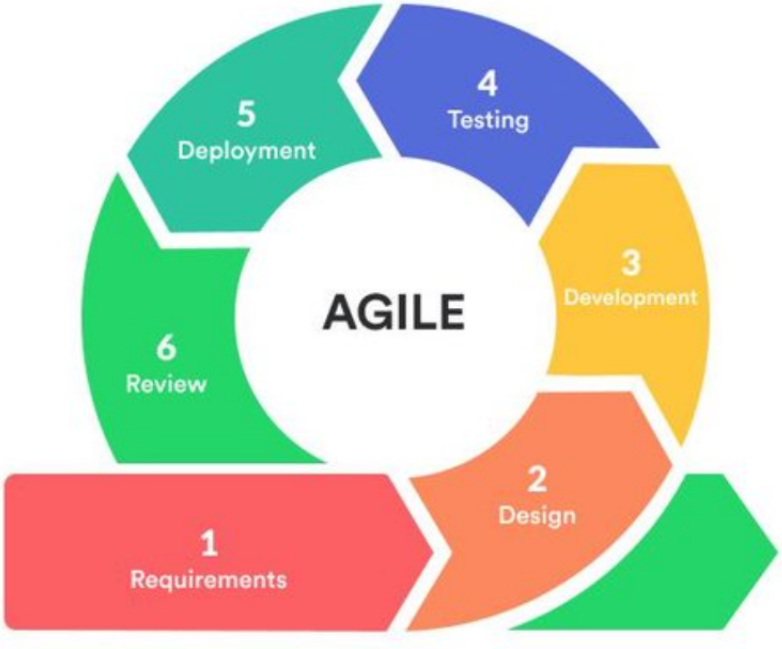

Figure 4.1: Methodology

Chapter 5

Body of the Project

5.1 Work Description

As an intern at Softograph Ltd. I was given the order to build a CV-Building Website and handle front-end only. The front end was built with ReactJs, CSS, bootstrap, and AntD.

5.2 Requirement Analysis

The CV-Builder project aims to develop a dynamic web application that simplifies and enhances the process of creating professional resumes (CVs) for users. The primary goal is to empower job seekers to easily generate impressive CVs tailored to their specific qualifications and career aspirations.

- User Registration and Authentication :
  Users should be able to register for an account by providing their name and password.
  Registered users can sign in securely using their credentials.
- Profile Management:
  Users can create and manage their personal profiles within the application.
  Profile management includes the ability to input and update personal information, work experience, education details, and skills.
- CV-Creation:
  The application offers a selection of pre-designed CV templates tailored to various professions and industries .
  Users can choose a template and customize it by adding their information.

- Printing:
  Users can easily print their completed CVs directly from the application dedicated "Print" feature generates a printable version of the CV in a user-friendly format.

Rich Picture

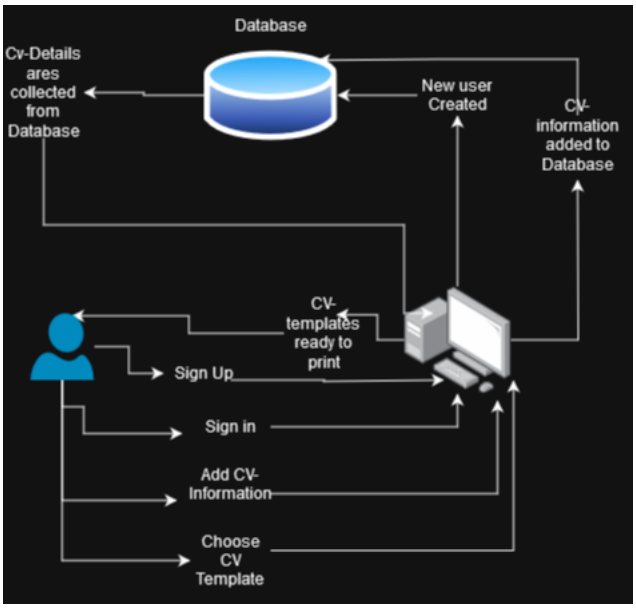

Figure 5.1: System analysis chart

Functional and Non-Functional Requirements

Functional Requirement No.	Functional Requirement Description
FR1	When the user enters information for registration and login, the application sends approval if the information is correct and redirects to the user dashboard
FR2	The system shall allow users to write or edit user information
FR3	The system shall allow the user to add as much information as desired
FR3	The system shall allow a user to choose a template
FR4	The system shall record the information given by the user to the database
FR5	The system shall put information in the CV templates
FR6	The system shall let the user print their desired CV

Figure 5.2: Functional Requirements

Category	Non-Functional Requirement Description
Usability	• The UI of this system is clean and simple. New users can get used to this software so fast. • On any POST request (Registration, Login) the database on • receiving the data saves the information on the database and • responds with a status of 200, else if there is a problem saving, it • responds with a status of 400 or 404.
Performance	• The system will be responsive with mobile and any type of device. • The system will respond to user requests in less than 0.1 seconds
Information	• User Can Download CV

Figure 5.3: Non-Functional Requirements

5.3 System Analysis

The CV-Builder project is a dynamic web application designed to simplify and enhance the process of creating professional resumes (CVs) for users. This system analysis provides an overview of the project's objectives, key functionalities, technology stack, and user experience considerations.

5.3.1 Six Element Analysis

		System Roles				
Process	Human	Non-Human Hardware	Computing Hardware	Software	Database	Communication on and Network
Register	Users enter credentials into sign up page	N/A	Desktop, Laptop, Tab, Mouse, Keyboard	Web Browser	Mongo DB	Internet
Login	Users enter credentials into Sign in Page	N/A	Desktop, Laptop, Tab, Mouse, Keyboard	Web Browser	Mongo DB	Internet
Create Profile	Clicking on The name of the User, the user is navigated to Profile Page	N/A	Desktop, Laptop, Tab, Mouse, Keyboard	Web Browser	Mongo DB	Internet
Choose template	Giving the information the User Chooses CV-Templates	N/A	Desktop, Laptop, Tab, Mouse, Keyboard	Web Browser	Mongo DB	Internet
Print	User gets to preview a template, clicking on Print Button the User can Print their desired CV	N/A	Desktop, Laptop, Tab, Mouse, Keyboard	Web Browser	Mongo DB	Internet

Figure 5.4: Six Element Analysis

5.3.2 Feasibility Analysis

This feasibility analysis report aims to evaluate the practicality and viability of the CV-Builder project, including technical, economic, operational, and scheduling considerations, to make an informed decision on its implementation.

Technical Feasibility:
The proposed technology stack, consisting of MongoDB, Express.js, ReactJS, and Node.js, is well-established and aligns with contemporary web development standards. Access to skilled developers and abundant online resources further enhances technical feasibility.
The incorporation of third-party libraries (AntD, Axios, React-Router) is technically sound, offering robust design, API integration, and seamless navigation features that complement the project's objectives.

Economic Feasibility :
A well-defined budget has been allocated to cover development expenses, hardware acquisition, software licenses, and ongoing operational costs.
While initial development costs are significant, they are offset by the long-term revenue potential, making the project economically feasible

5.3.3 Problem Solution Analysis

Problem analysis involves the initial step of comprehending and clearly defining the issue that needs to be addressed. On the other hand, problem-solving focuses on discovering and implementing solutions that align with the problem's specific requirements and limitations. When it comes to designing and constructing information systems, a significant portion of the work revolves around resolving issues, whether the goal is to enhance existing systems or seize opportunities in the market. During the

development phase, I encountered numerous challenges, particularly because I was new to MERN Stack Development, which comprises MongoDB, ExpressJS, ReactJS, and NodeJS. Initially, I had limited knowledge of how these technologies functioned. At the outset of my internship, I undertook extensive self-study to gain a deeper understanding of JavaScript libraries. I grappled with various issues, and my code often didn't yield the desired results. Fortunately, my supervisor provided invaluable assistance in troubleshooting and rectifying these issues. Additionally, I encountered some hurdles, I have faced difficulties establishing backend , using Axios, placements which I learned to address along the way

5.3.4 Effect and Constraints Analysis

- **Empowering Users:**
  The MERN-CV-Building Project exerts a transformative effect by empowering users to effortlessly craft professional resumes (CVs). It enhances their career prospects, providing them with a valuable tool in a competitive job market.

- **Skill Advancement:**
  The development team gains a wealth of experience in cutting-edge technologies, full-stack web development, and user-centered design. This newfound expertise becomes a valuable asset for future projects and endeavors.

- **Budgetary Limitations:**
  The project operates within a predefined budget, which may impose restrictions on the extent of feature development, and marketing endeavors.

- **Rigorous Timelines:**
  The project's timeline for completion is fixed, necessitating a meticulous adherence to deadlines. Maintaining quality development within these constraints is paramount.

5.4 System Design

UML Diagrams

A UML diagram is a visual representation based on the Unified Modeling Language (UML) used to depict a system, including its primary actors, their roles, actions, artifacts, or classes. Its purpose is to provide a clearer understanding of the system, facilitate modifications, support maintenance, and document system-related information. In this section, we present activity diagrams for all user groups, which are essentially more sophisticated versions of flowcharts. These diagrams model the flow of activities from one to another within the system.

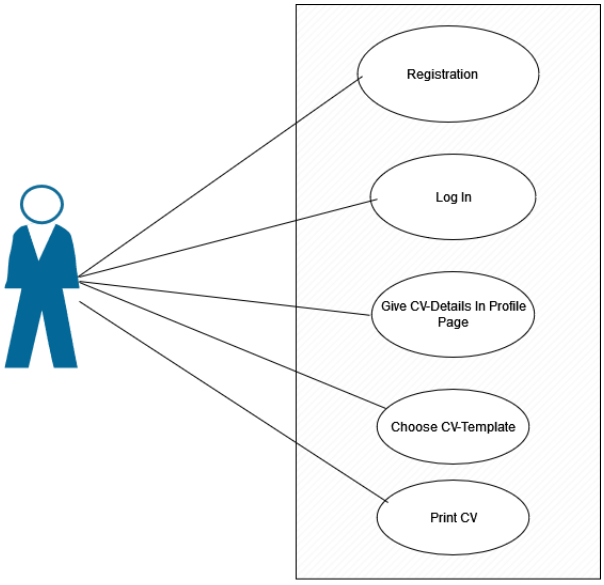

Figure 5.5: Use Case Diagram

Architecture

The architecture of the CV-Builder project is meticulously designed to deliver a seamless and efficient user experience. Leveraging the power of the MERN stack (MongoDB, Express.js, ReactJS, Node.js), the system comprises a well-structured combination of front-end and back-end components.

On the front end, ReactJS, HTML, CSS, and JavaScript collectively form the foundation for building interactive and user-friendly interfaces. These technologies allow for the creation of dynamic web pages, enabling users to easily navigate and interact with the application.

The back-end of the system is built upon Node.js and Express.js, providing scalability and robust server-side logic. Node.js's non-blocking I/O capabilities ensure optimal performance, even during high user traffic. MongoDB serves as the database, ensuring secure storage of user profiles and CV data.

To enhance the user experience, the project incorporates third-party libraries such as AntD for design, Axios for efficient API calls, and React-Router for seamless page navigation. These libraries contribute to the project's visually appealing and intuitive design, making it accessible to users with diverse technical backgrounds.

The architecture of the CV-Builder project reflects a well-balanced combination of cutting-edge technologies, efficient front-end and back-end components, and user-centric design, all working harmoniously to achieve the project's goal of simplifying and enhancing the process of creating professional resumes (CVs) for users.

5.5 Implementation

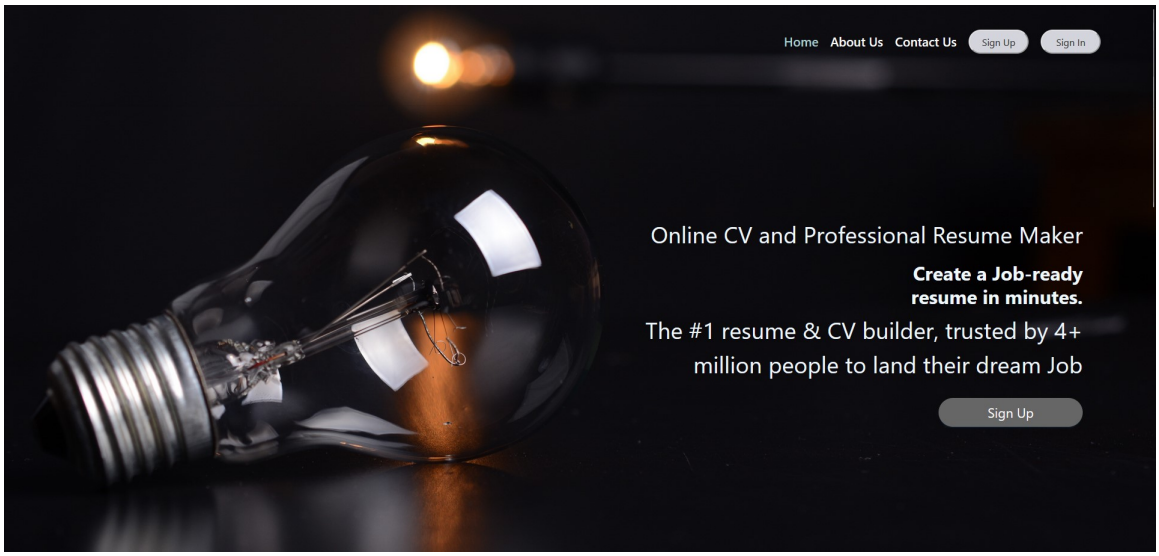

Figure 5.6: Landing Page

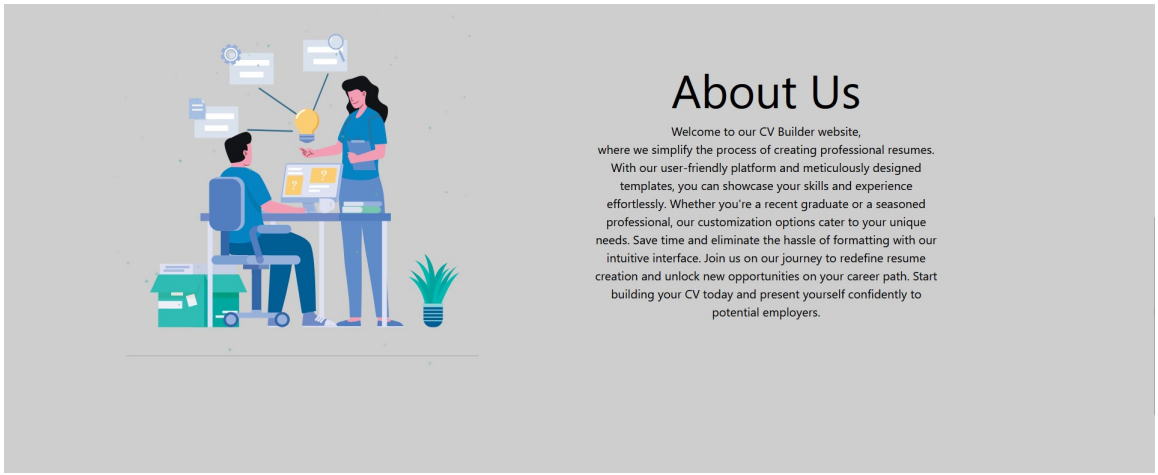

Figure 5.7: Landing Page About Us

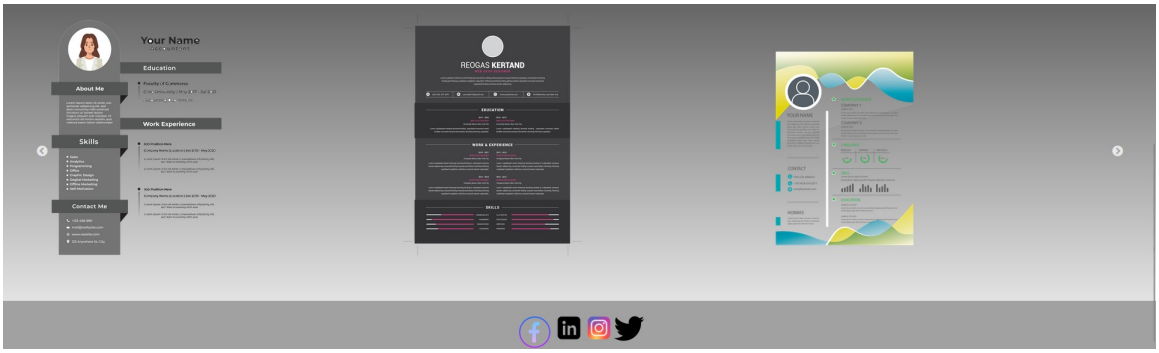

Figure 5.8: Landing Page Contact Us

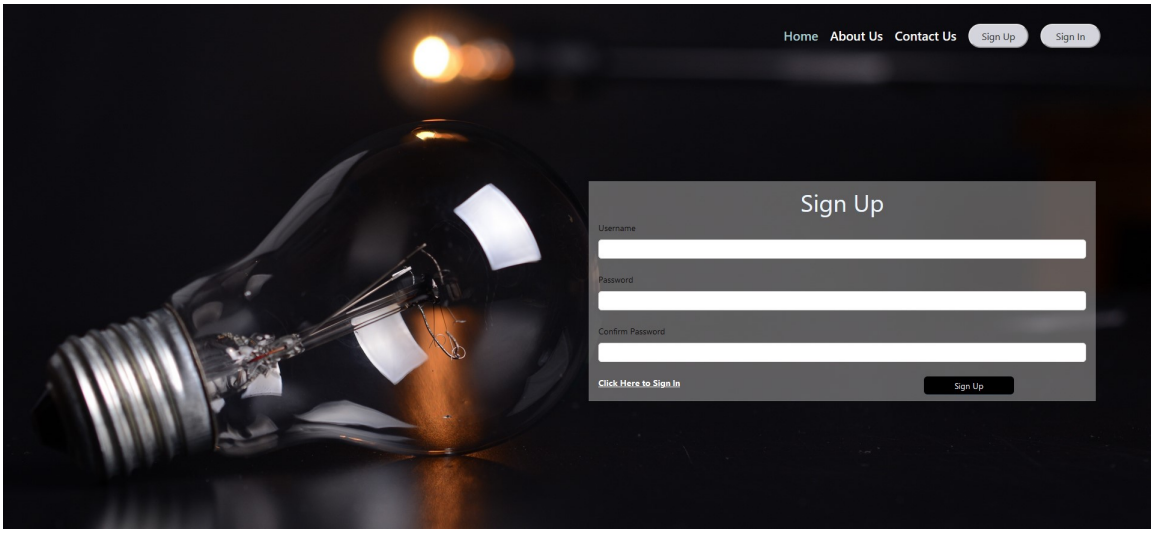

Figure 5.9: Sign Up Page



Figure 5.10: User Home Page

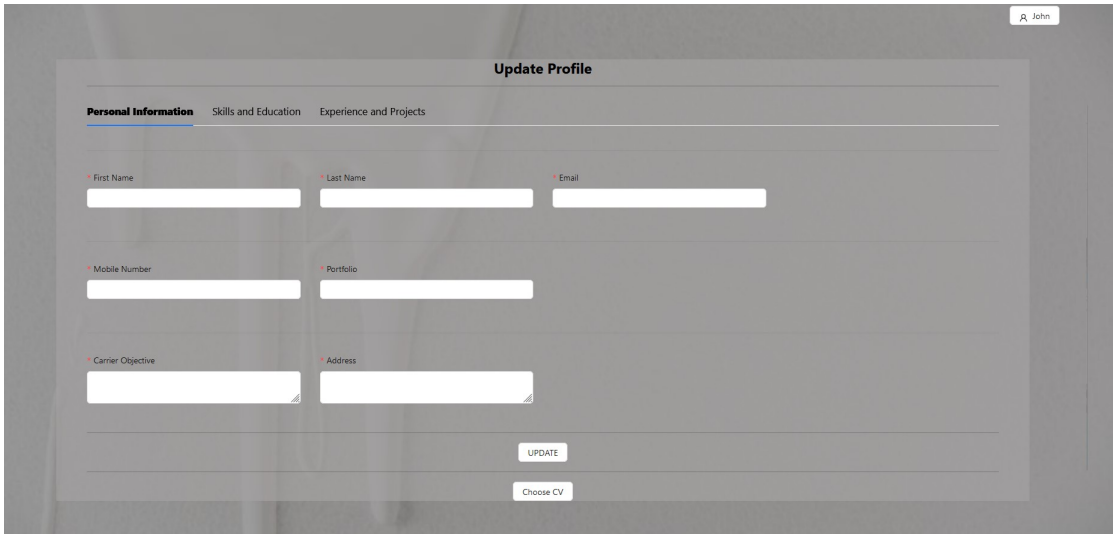

Figure 5.11: User Personal Information

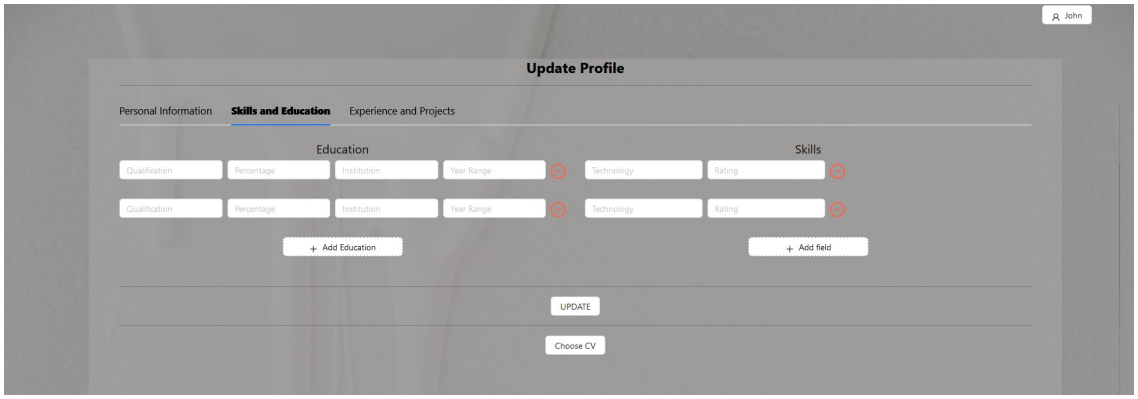

Figure 5.12: User Skill and Education

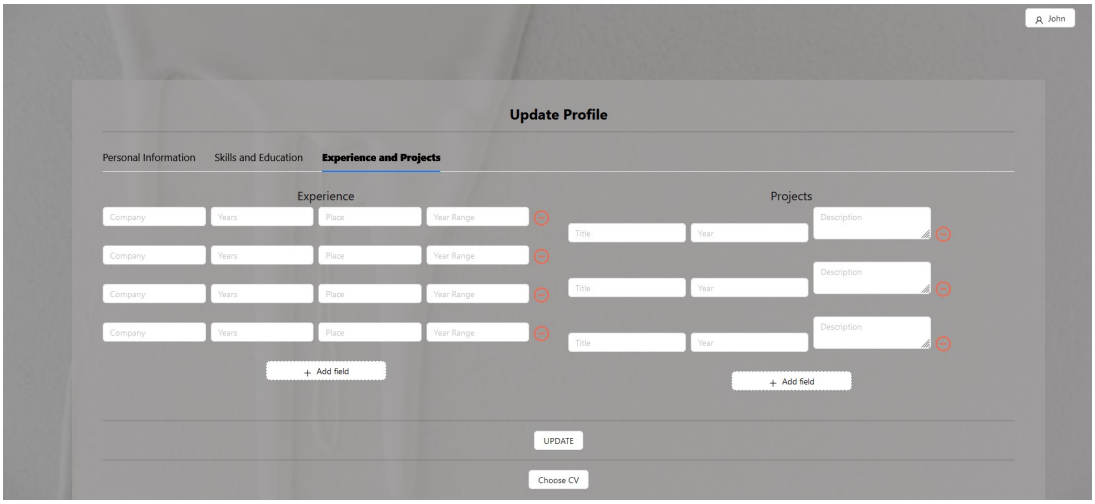

Figure 5.13: User Experience and Project

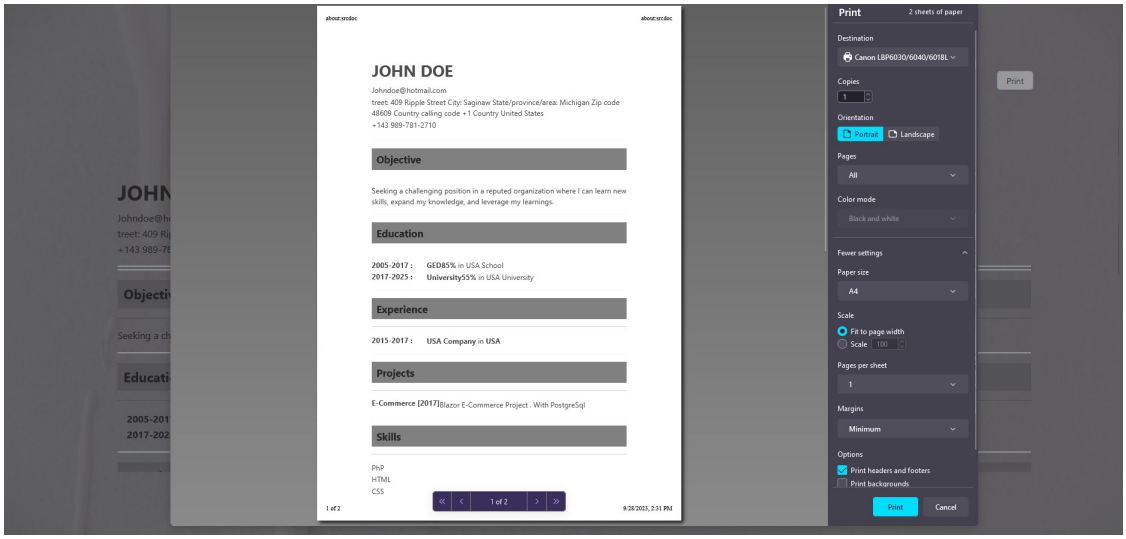

Figure 5.14: Print Image

5.6 Testing

Input

Table 5.6.1

Process	Fields(types)
Sign Up (Users)	User Name – String Password – String Confirm Password - String
Sign In	Username – String Password – String
Profile Input for CV	First Name – String Last Name – String Email – String Mobile Number – Number Portfolio – Link Carrier Objective – String Address – String Qualification – String Percentage – Number Institution – String Year Range – Number Technology – String Rating – Number Company - String Years – Number Place – String Year Range – Number Title – String Year – Number Description – String

Figure 5.15: Testing Input

Output

Process	Output
Sign Up	On Success – Alert Message: "Registration Successful" On Failure – Alert Message: "Registration Failed"
Sign In	On Success – Alert Message: "Login Successful" and redirected to User Home Page On Failure – Alert Message: "Login Unsuccessful"
CV Print	CV template – for preview Printing Page – Pops Up

Figure 5.16: Testing Output

Chapter 6

Results & Analysis

The completion of the MERN-Stack CV-Builder Project was a challenging journey. This report focuses on the outcomes of the project, highlighting both the challenges faced and the results achieved during its development and testing phases.

- Challenges Faced:
  The project presented various challenges throughout its development. The project's complexity required a trial-and-error approach, which was necessary to navigate the uncharted territory of building a web application framework.

- Objectives and Scope:
  It's essential to emphasize that the primary objective of this project was not to deliver a fully functional service but rather to lay the groundwork for future similar projects. This scope influenced the development approach, focusing on creating a skeleton of the final system, allowing for a more manageable workload.

- Testing Phase:
  The testing phase brought its own set of challenges, including the discovery of bugs, feelings of failure, and a sense of inadequacy. However, these challenges were instrumental in identifying and implementing solutions for the encountered bugs. The iterative testing and debugging process were pivotal in improving the project's functionality and stability.

- Results Achieved:
  Despite its small-scale nature, the application successfully withstood testing and emerged as a functional entity in its own right. It effectively serves its intended purpose as a skeletal framework for future projects. The project's stability reached a level where further iterations were not required, demonstrating its readiness for future development stages.

- Analysis:
  The project's success lies in its ability to fulfill its primary objective – establishing a framework for future similar projects. While challenges were prevalent, they led to valuable learning experiences and the development of problem-solving skills. The project's stability and functionality at the end of testing indicate that it achieved the envisioned groundwork for future endeavors in a similar domain.

- Conclusion:
  The MERN-Stack CV-Builder Project, though challenging, resulted in a successful skeletal framework for future development. The testing and iterative process, though demanding, led to a stable and functional application. The project serves as a testament to the importance of perseverance, problem-solving, and adaptability in the face of challenges, and it stands ready to pave the way for future projects in a similar vein.

Chapter 7

Project as Engineering Problem Analysis

7.1 Sustainability of the Project/Work

The realm in which this project operates presents a landscape that is not without its share of advantages and disadvantages. While I hold a high degree of confidence in the sustainability of the designs I've conceived and the efficiency of the system itself, there exists a notable consideration regarding the project's overarching model. To be precise, while the core program embodies sustainability by design, the broader model within which it resides may raise certain concerns. It is essential to acknowledge that the project prioritizes efficiency, avoiding the inclusion of resource-intensive supplementary functions. Nevertheless, there may be room for improvement in future iterations to enhance the model's sustainability. It's important to underscore that the current rendition of the project serves as a foundational layer, deliberately focusing on core functionality. As such, any potential sustainability issues within the broader model can be readily addressed and refined in subsequent builds, ensuring that the long-term viability and resilience of the project remain a top priority.

7.2 Social and Environmental Effects and Analysis

Social Effects
Facilitating Empowerment: The platform has had a profound impact on empowering its users, granting them the ability to craft a professional online presence. This, in turn, effectively bridges the chasm between job seekers and career opportunities, rendering it a pivotal tool for career advancement and development.
Enhanced Accessibility: The platform's user-centric design and intuitive navigation have had far-reaching effects on accessibility. It goes beyond mere usability, ensuring

that individuals with varying levels of technical proficiency can seamlessly engage with the platform. This commitment to user-friendliness fosters a culture of inclusivity, making sure that opportunities are accessible to a wider and more diverse audience.
Environmental Effects
Promoting Energy Efficiency: Notably, the project's emphasis on optimizing code and server configurations has yielded substantial energy efficiency gains. By streamlining resource utilization, the website significantly reduces energy consumption. This eco-conscious approach aligns with broader sustainability goals and showcases a commitment to responsible resource management.
Leveraging Cloud Infrastructure: The strategic use of cloud services in the project's infrastructure has led to dynamic scaling capabilities. This, in turn, optimizes server usage, ensuring that resources are allocated precisely where and when they are needed. Consequently, this approach minimizes resource wastage, contributing to a more sustainable technological ecosystem by making efficient use of cloud-based resources.

7.3 Addressing Ethics and Ethical Issues

The ethical considerations surrounding this project warrant careful examination, as they currently rest on somewhat shaky ground. The project's core function revolves around the responsible management of users' personal information. However, it's evident that the current iteration lacks robust security measures. The existing authentication system merely conducts a basic comparison of provided usernames and passwords against entries in the database, falling short in terms of security. This raises ethical red flags, as deploying the project in its current state could potentially expose users' personal data to risks and breaches. To address this ethical dilemma, it is imperative that future builds prioritize the implementation of more stringent security measures. This entails adopting advanced credential management practices and storing user information off-site, effectively fortifying the project against any potential malicious actors seeking unauthorized access to sensitive user data. Such proactive measures are essential to uphold the ethical responsibility of safeguarding user information and privacy.

Chapter 8

Lesson Learned

In my internship report, I reflect on my experiences with the CV-Builder project, where I faced coding challenges head-on while striving to infuse sustainability principles into our work. These challenges included managing complex asynchronous operations, optimizing website performance, and embarking on a custom development journey without relying on templates. Through relentless effort and creativity, my team and I found solutions that not only enhanced the user experience but also reduced energy consumption, aligning with sustainability goals.My internship experience reaffirmed the value of collaborative problem-solving and knowledge sharing. It was inspiring to witness how our collective efforts expedited solutions and enriched our skill set. This journey taught me that coding resilience and efficiency are paramount, and that efficient code not only benefits users but also contributes to a smaller carbon footprint. Overall, this report encapsulates my growth and the profound lessons I've learned during my time with the CV-Builder project.

8.1 Problems Faced During this Period

Challenges

Asynchronous Complexity: Managing asynchronous operations, such as API calls and data updates, within a real-time web application was a central coding challenge. Ensuring data consistency and preventing race conditions demanded meticulous coding practices.

Performance Optimization: The project required us to optimize website performance, particularly when handling extensive user data. Our goal was to reduce loading times and minimize server resource utilization for a seamless user experience.

Custom Development: It's important to note that we did not rely on templates; instead, we created each page and dynamic template from scratch. This added an extra layer of complexity, as every aspect of the website had to be meticulously designed and

developed to meet our specific requirements.

8.2 Solution of those Problems

- Asynchronous Mastery:
  To conquer asynchronous complexity, we embraced a multifaceted approach. We structured our code to handle asynchronous tasks gracefully, leveraging techniques like promises and async/await for robust data management. Rigorous testing and debugging procedures were crucial to maintain data integrity. This coding excellence not only enhanced user experience but also aligned with sustainability principles by minimizing server workload and energy consumption.

- Performance Enhancement:
  Prioritizing website performance, we implemented innovative strategies. Data caching mechanisms were introduced to curtail redundant database queries, while lazy loading techniques optimized resource allocation. Continuous server performance monitoring ensured our proactive approach yielded substantial improvements in website speed and efficiency. These efforts demonstrated the symbiotic relationship between coding efficiency and sustainability.

Collaboration and Knowledge Sharing: . Collaborative problem-solving was instrumental in navigating coding complexities. Team members actively shared knowledge, engaged in code reviews, and readily sought assistance, fostering a dynamic learning environment. This collaborative ethos not only expedited solutions but also enriched our collective skill set

Key Takeaways

- Coding Resilience:
  Overcoming intricate coding challenges underscored the importance of coding resilience. It reinforced the idea that tenacity, adaptability, and creative problem-solving are essential attributes for a developer. These challenges pushed us to explore innovative solutions and sharpened our coding skills.

- Efficiency and Sustainability:
  The pursuit of coding excellence and performance optimization revealed the undeniable synergy between coding efficiency and environmental sustainability. Efficient code not only benefits users through improved performance but also reduces server workload, contributing to lower energy consumption and a smaller carbon footprint.

- Custom Development:

Creating each page and dynamic template from scratch was a demanding but rewarding endeavor. It reinforced the value of tailoring solutions to specific project requirements and highlighted the importance of a meticulous and detail-oriented approach.

Chapter 9

Future Work & Conclusion

9.1 Future Works

In an era where environmental consciousness has taken center stage, businesses and individuals are increasingly recognizing the imperative of harmonizing their digital operations with sustainability objectives. In the realm of the internet, a sphere notorious for its voracious energy consumption, several pivotal initiatives have emerged to promote eco-conscious web practices. Let's delve deeper into these transformative strategies:

Green Hosting Pioneers: A fundamental step towards sustainable web development is the selection of hosting providers wholeheartedly committed to renewable energy sources. Traditional data centers often rely on fossil fuels, casting a heavy carbon shadow upon websites and digital services. However, visionary hosting companies harness the power of renewable energy, such as wind and solar, to significantly mitigate the environmental footprint of their hosting services. Opting for these conscientious hosting providers ensures that the digital infrastructure supporting your website is aligned with your sustainability aspirations.
Carbon Footprint Quantification: Integrating tools to monitor and quantify the website's carbon footprint, promoting transparency in environmental impact assessment.
Skills Development: o genuinely make a meaningful difference in the pursuit of sustainability, it is imperative to monitor and quantify the carbon footprint of websites. This not only enables a clear understanding of environmental impact but also fosters transparency, a cornerstone of responsible digital stewardship. By seamlessly integrating cutting-edge tools and metrics into your web ecosystem, you empower website owners to measure, analyze, and reduce their carbon emissions effectively.

9.2 Conclusion

My internship journey with the CV-Builder project provided me with invaluable insights into addressing complex coding challenges while integrating sustainability principles. This academic reflection delves into the coding-specific obstacles we encountered, the inventive solutions we crafted, and the profound takeaways from the experience, while also considering the project's broader context and objectives.
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aligning with sustainability goals.
My internship experience reaffirmed the value of collaborative problem-solving and knowledge sharing. It was inspiring to witness how our collective efforts expedited solutions and enriched our skill set. This journey taught me that coding resilience and efficiency are paramount, and that efficient code not only benefits users but also contributes to a smaller carbon footprint. Overall, this report encapsulates my growth and the profound lessons I've learned during
my time with the CV-Builder project.

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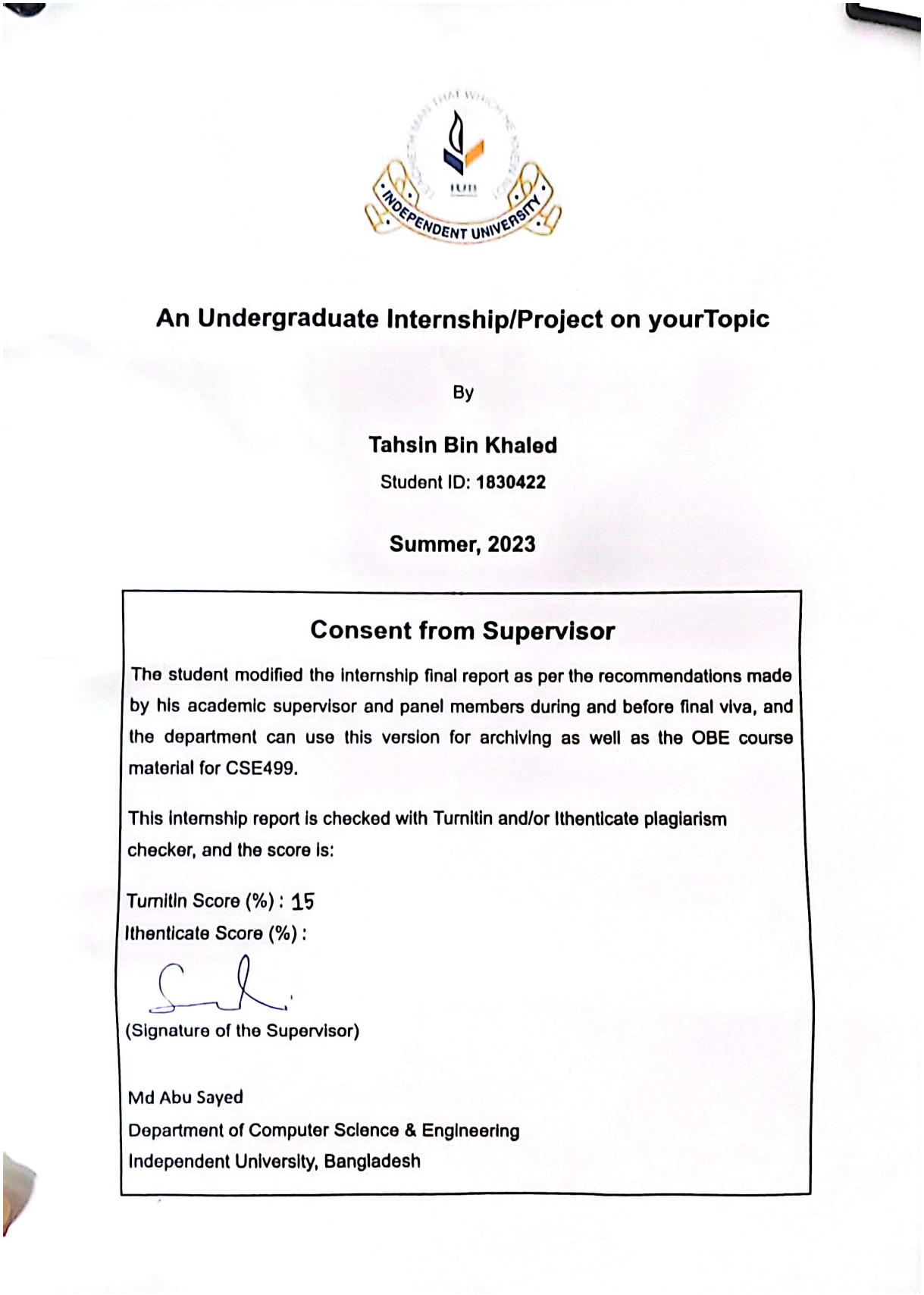

An Undergraduate Internship/Project on yourTopic

By

Tahsin Bin Khaled

Student ID: **1830422**

Summer, 2023

Consent from Supervisor

The student modified the internship final report as per the recommendations made by his academic supervisor and panel members during and before final viva, and the department can use this version for archiving as well as the OBE course material for CSE499.

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Md Abu Sayed
Department of Computer Science & Engineering
Independent University, Bangladesh

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