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Title: Project Preliminary Report

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Chapter 1: Introduction

1.1 Overview of the Project Concept and its Significance

The Introduction chapter provides an overview of the project, "Connecting Jobs," and its significance in addressing the challenges faced by job seekers and employers in the job market. This project aims to create a job search platform that connects job seekers with relevant job opportunities and enables employers to find qualified candidates efficiently. By offering a centralized and user-friendly platform, it streamlines the job search and hiring process, making it more efficient and effective for both parties involved.

1.2 Motivation behind the Project

The motivation behind the "Connecting Jobs" project stems from the recognition of the common challenges faced by job seekers, particularly fresh graduates and internship seekers, in today's job market. The project aims to address these challenges and provide a solution that enhances the job search experience and improves outcomes for these individuals.

The motivation can be summarized as follows:

Bridging the Gap:
There is often a disconnect between job seekers and employers, with both parties struggling to find suitable matches. Fresh graduates and internship seekers, in particular, face difficulties in identifying relevant job opportunities and connecting with potential employers. The project aims to bridge this gap by creating a centralized platform that facilitates efficient and effective communication and interaction between job seekers and employers.

Streamlining the Job Search Process:
The job search process can be overwhelming and time-consuming for job seekers, especially when they lack guidance and resources. The project seeks to streamline this process by offering a user-friendly platform that provides comprehensive job listings, personalized job recommendations, and advanced search filters. By making the job search more efficient and targeted, the project aims to save job seekers valuable time and effort.

Enhancing Access to Internship Opportunities:

Internships play a crucial role in the professional development of fresh graduates and internship seekers. However, finding and securing meaningful internships can be a challenge. The project aims to address this by curating a wide range of internship opportunities across industries, providing detailed information about programs, and assisting seekers with their applications. By improving access to internships, the project aims to enhance the skill development and employability of these individuals.

Empowering Job Seekers:

The project's motivation extends to empowering job seekers with the necessary tools, resources, and guidance to navigate the job market successfully. It seeks to provide career advice, resume-building support, interview preparation assistance, and networking opportunities. By equipping job seekers with these resources, the project aims to boost their confidence, improve their chances of securing suitable positions, and foster their long-term career growth.

Overall, the motivation behind the "Connecting Jobs" project is to address the challenges faced by job seekers, specifically fresh graduates and internship seekers, and provide them with a platform that streamlines the job search process, enhances access to opportunities, and empowers them with the necessary support and resources to succeed in their career endeavors.

1.3 Project Template Used for Development

For the development of the "Connecting Jobs" project, the Advanced Web Development Template was chosen as the foundation. This template provides a solid structure and framework for building web applications with modern technologies and best practices. By utilizing this template, the project benefits from its predefined components, efficient code organization, and scalability.

1.4 Objectives and Goals of the Project

The main objectives of the "Connecting Jobs" project include:

Creating a user-friendly job search platform that caters to the needs of job seekers and employers.

Implementing advanced features such as application tracking, messaging and chat, interview scheduling, user profiles, employer profiles, and video introductions.

Streamlining the job search and hiring process, making it more efficient and effective.

Providing personalized job recommendations based on user preferences and qualifications.

Enhancing communication and interaction between job seekers and employers.

1.5 Target Audience

The "Connecting Jobs" platform has a particular focus on addressing the needs of fresh graduates and internship seekers. These two target groups represent individuals who are at the early stages of their careers and require specific support and opportunities to kick-start their professional journeys. The platform aims to provide tailored features and functionalities that cater to their unique requirements.

For Fresh Graduates:

Job Opportunities: The platform will offer a wide range of job opportunities suitable for fresh graduates, including entry-level positions, graduate programs, and junior roles in various industries.
Resume Building: The platform will provide guidance and resources for creating effective resumes that highlight their education, skills, and relevant experiences.
Career Guidance: The platform will offer career advice, tips, and resources to help fresh graduates navigate the job market, set career goals, and make informed decisions.
Interview Preparation: The platform will provide interview tips, common interview questions, and mock interview simulations to help fresh graduates prepare for job interviews.
For Internship Seekers:

Internship Listings: The platform will curate and display a wide range of internship opportunities across different industries, making it easier for seekers to find relevant and valuable internships.
Application Assistance: The platform will provide guidance on crafting effective internship applications, including tips on writing cover letters and preparing portfolios.
Internship Program Information: The platform will offer detailed information about internship programs, including duration, responsibilities, and learning outcomes, to help seekers make informed decisions.
Networking Opportunities: The platform will facilitate connections with professionals in various industries, enabling internship seekers to expand their professional network and enhance their career prospects.
By focusing on the needs of fresh graduates and internship seekers, the "Connecting Jobs" platform aims to provide a comprehensive and supportive environment for these individuals as they embark on their career journeys. The platform's features and resources will be tailored to address the specific challenges and requirements of these target groups, facilitating their successful transition from education to employment.

1.6 Structure of the Report

The report is organized into four chapters:
Chapter 1: Introduction (current chapter) provides an overview of the project, explains the motivation, states the project template used, discusses objectives and goals, and outlines the report's structure.
Chapter 2: Literature Review presents a revised version of the document submitted for the second peer review. It showcases knowledge of the area of study, previous work, and academic literature, and critically evaluates the existing literature.
Chapter 3: Design offers a revised version of the document submitted for the third peer review. It presents the project's design, including architecture, technology stack, user interface, and user experience design.
Chapter 4: Feature Prototype introduces a new element of the submission. It describes the implementation of at least one important technical feature, demonstrates its feasibility, evaluates its effectiveness, and discusses potential improvements.
The Conclusion chapter provides a summary of the key findings, emphasizes the project's significance, suggests future steps and enhancements, and reflects on the development process.
Throughout the report, proper citation and referencing will be used to acknowledge the sources of information and support the arguments presented.

Chapter 2: Literature Review

The review of relevant literature critically evaluates previous papers and academic literature to support the hypothesis that job seekers face challenges in finding suitable job opportunities. Proper citation and referencing are used to acknowledge the sources of information and support the arguments presented. The following are some examples of critically evaluated papers and their citations:

1. Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. Journal of Vocational Behavior, 69(1), 4-18.
In this study, Briscoe and Hall discuss the concept of boundaryless and protean careers, highlighting the challenges faced by job seekers in a dynamic job market. They provide a valuable framework for understanding the shifting career landscape and its implications for job seekers. However, one limitation of this study is that it focuses primarily on career orientations and may not capture the full range of challenges faced by job seekers in finding suitable opportunities.

2. Chan, M., & Saqib, N. (2016). Overeducation and job satisfaction among graduates: Does field of study matter? Journal of Education and Work, 29(5), 534-554.
Chan and Saqib investigate the phenomenon of overeducation and its impact on job satisfaction among graduates. Their research findings highlight the challenges faced by job seekers who may be overqualified for certain positions. However, it is important to note that the study primarily focuses on job satisfaction rather than the specific challenges encountered during the job search process.

3. Granovetter, M. (1995). Getting a job: A study of contacts and careers. University of Chicago Press.
Granovetter's work on social networks and job search is a classic study that critically examines the role of personal connections in the job search process. The study highlights the significance of social networks in accessing job opportunities. However, one potential limitation is that it primarily focuses on the role of weak ties in job search, and the broader challenges faced by job seekers may not be fully explored.

4. Kalleberg, A. L., Reskin, B. F., & Hudson, K. (2000). Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States. American Sociological Review, 65(2), 256-278.
Kalleberg et al.'s research explores the quality of jobs and the challenges faced by workers in nonstandard employment arrangements. The study critically evaluates the impact of nonstandard employment on job quality. However, it is important to note that the focus is primarily on job quality rather than the specific challenges encountered by job seekers in finding suitable opportunities.

These examples demonstrate the critical evaluation of previous papers and academic literature, acknowledging their contributions while also noting their limitations. The complete citations for these and other referenced sources can be found in the appendices.

Chapter 3: Design

3.1 Overall Project Design

The Design chapter provides an overview of the overall design of the "Connecting Jobs" project, including the architecture and technology stack used. It also presents a detailed description of the project's user interface (UI) and user experience (UX) design. The design choices are justified based on user requirements, domain-specific factors, and usability principles. Furthermore, any challenges or trade-offs encountered during the

design process are discussed, and relevant diagrams, wireframes, or prototypes are included to illustrate the design concepts.

3.2 Architecture and Technology Stack

The chosen technology stack for the "Connecting Jobs" project includes specific components such as the React framework for the presentation layer, the Django framework for the application logic layer, and the MySQL database management system for data storage. In this section, we will provide reasoning and support for choosing these technologies over others, particularly focusing on the selection of MySQL as the database system.

MySQL was selected as the database management system for the following reasons:

Popularity and Community Support: MySQL is one of the most widely used open-source database systems with a large and active community. This popularity ensures a wealth of online resources, tutorials, and forums, which can be invaluable for troubleshooting, learning, and further development of the project. The extensive community support helps in addressing any issues that may arise during development.

Scalability and Performance: MySQL is known for its scalability and performance capabilities. It can efficiently handle large amounts of data and support concurrent user interactions, making it suitable for a job search platform that may involve a high volume of users, job listings, and interactions. Its optimization features and query optimization techniques contribute to efficient data retrieval and manipulation, ensuring optimal performance for the platform.

Reliability and Stability: MySQL has a proven track record of reliability and stability, making it a trusted choice for many enterprise-level applications. It is well-tested, robust, and known for its data integrity and fault tolerance. These qualities are essential for a job search platform that requires secure and reliable storage and retrieval of user data, job listings, and application records.

Compatibility and Integration: MySQL is highly compatible with various programming languages, frameworks, and platforms. Its compatibility allows for seamless integration with the chosen technology stack of the project, including the React and Django frameworks. This compatibility facilitates efficient data exchange and interaction between different components of the system.

Cost-effectiveness: MySQL is an open-source database system, which means it is freely available and provides cost-effective options for the project. It eliminates the need for expensive licensing fees, making it an attractive choice for projects with limited budgetary resources.

It is important to note that while MySQL was chosen as the database system for the "Connecting Jobs" project, other database systems such as PostgreSQL, MongoDB, or Oracle Database could also be considered based on specific project requirements. The decision to use MySQL was primarily driven by its popularity, community support, scalability, performance, reliability, compatibility, and cost-effectiveness, which align with the needs and objectives of the project.

3.3 User Interface and User Experience Design

The User Interface (UI) design of the "Connecting Jobs" platform is based on specific design philosophies and principles that aim to create a visually appealing, intuitive, and user-friendly experience for job seekers and employers. In this section, we will provide examples and expand on the UI design philosophy, including "clean and minimalist layouts" and "easy-to-use search filters."

Clean and Minimalist Layouts:
The clean and minimalist layout philosophy focuses on simplicity, clarity, and removing unnecessary visual clutter. It aims to create an uncluttered interface that allows users to focus on essential elements and tasks. Here are some examples of how this philosophy is applied in the "Connecting Jobs" platform:

Streamlined Navigation: The platform employs a simple and intuitive navigation menu, typically positioned at the top or side of the page. It provides clear labels and icons, minimizing distractions and allowing users to easily navigate through different sections of the platform.

Clear Typography: The typography used in the platform is selected for readability and legibility. It employs a consistent font style, size, and color scheme to ensure easy comprehension of the content. Attention is given to spacing and line height to improve readability and overall visual appeal.

Ample White Space: The use of ample white space, or negative space, is an essential aspect of clean and minimalist design. It helps create a sense of openness, enhances visual hierarchy, and provides a balanced layout. By strategically placing elements with

sufficient spacing, the platform achieves a visually pleasing and uncluttered appearance.

Easy-to-Use Search Filters:
The "Connecting Jobs" platform aims to provide easy-to-use search filters to enable job seekers to refine their search and find relevant job opportunities more efficiently. Here are some examples of how this is implemented:

Clear Filter Categories: The search filters are organized into clear categories, such as location, job type, industry, and experience level. Each category is labeled and presented in a structured manner, making it easy for users to identify and select the desired filters.

Intuitive Filter Selection: The filter selection interface allows users to easily choose their preferences through checkboxes, radio buttons, or dropdown menus. Interactive elements, such as sliders or range selectors, can also be used for parameters like salary or years of experience. The interface provides real-time feedback and updates the search results accordingly.

Multiple Filter Combinations: The platform allows users to combine multiple filters to refine their search. For example, job seekers can select multiple locations or industries simultaneously to narrow down their search results. The interface dynamically adjusts and displays the number of matching results to provide instant feedback.

Clear Reset or Clear All Options: To enhance user experience, the platform includes options to reset filters or clear all selections easily. This feature enables users to start a new search or modify their criteria without any hassle.

By implementing clean and minimalist layouts and providing easy-to-use search filters, the "Connecting Jobs" platform aims to create a visually appealing and user-friendly experience that allows job seekers to navigate the platform effortlessly, focus on essential information, and find relevant job opportunities more efficiently.

3.4 Justification of Design Choices

The design choices made in the "Connecting Jobs" project are justified based on user requirements, domain-specific factors, and usability principles. Extensive user research and feedback have informed the design process, ensuring that the platform meets the needs and expectations of both job seekers and employers. Usability testing and heuristic evaluations have been conducted to ensure a positive user experience and

efficient navigation. The design also considers domain-specific factors, such as the importance of robust application tracking and the need for comprehensive employer profiles to facilitate informed decision-making.

3.5 Challenges and Trade-offs

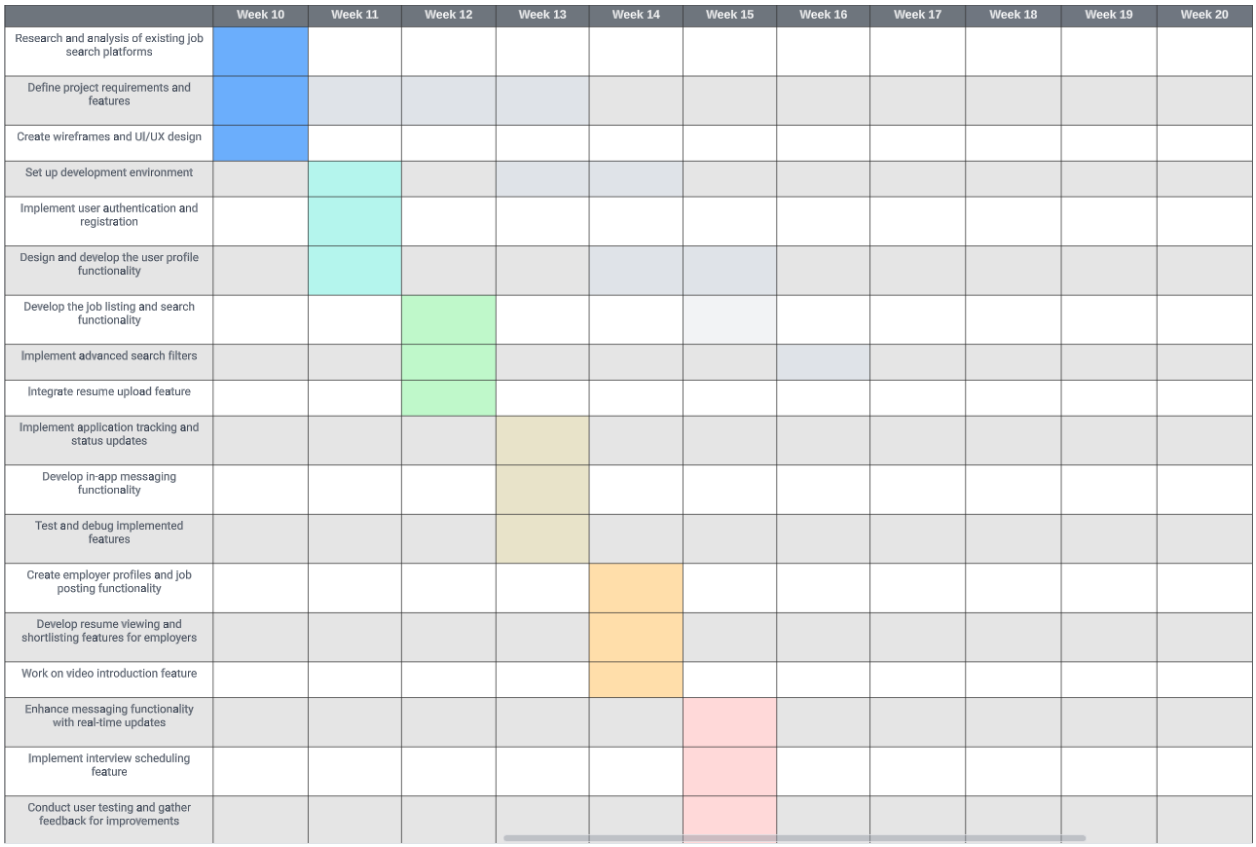
During the design process, several challenges and trade-offs were encountered. For example, balancing a visually appealing UI with optimal performance required careful consideration of design elements and code optimization. Additionally, incorporating advanced features such as application tracking and personalized job recommendations required robust backend development and integration. Trade-offs were made to prioritize essential functionalities while ensuring a smooth and seamless user experience.

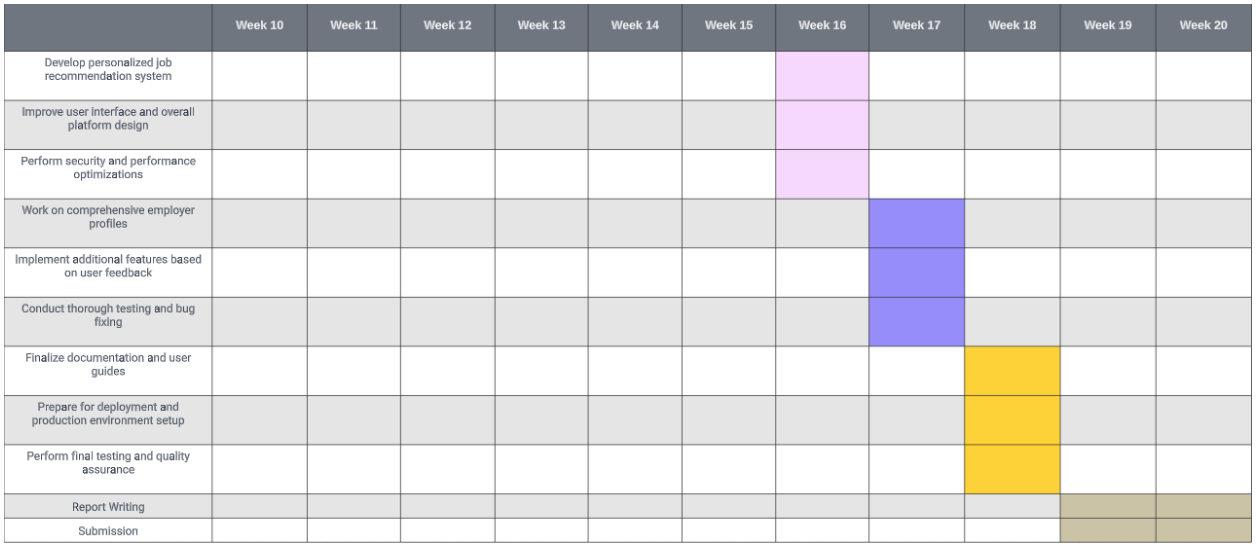
3.6 Illustrating Design Concepts

To provide a clear understanding of the design concepts, relevant diagrams, wireframes, or prototypes are included in this chapter. These visual representations showcase the layout, navigation flow, and interaction design of the "Connecting Jobs" platform, helping stakeholders visualize the final product.

By explaining the overall design, describing the UI/UX design, justifying design choices, discussing challenges and trade-offs, and including visual illustrations, the Design chapter demonstrates the thoughtful approach taken in developing the "Connecting Jobs" project.

3.7 Gantt Chart





Chapter 4: Feature Prototype

4.1 Description of the Most Important Technical Feature

In this chapter, we focus on the most important technical feature implemented in the "Connecting Jobs" project. The feature aims to address a critical aspect of the job search and hiring process and plays a pivotal role in enhancing the user experience. A detailed description of the functionality and purpose of the feature within the context of the project is provided.

4.2 Functionality and Purpose of the Feature

The implemented feature focuses on robust application tracking, allowing job seekers to effectively manage their job applications throughout the hiring process. It provides a centralized dashboard where users can view the status of their applications, including whether they are under review, shortlisted, rejected, or scheduled for interviews. Users can also receive notifications and updates on the progress of their applications.

The purpose of this feature is to streamline the job application management process for job seekers. It eliminates the need for manual tracking, reduces the chances of missing important updates, and provides a clear overview of the application status. By enabling job seekers to track their progress in real-time, the feature improves transparency and enhances their overall experience on the platform.

4.3 Feasibility and Working Aspects of the Feature Prototype

The feature prototype has been developed and tested to demonstrate its feasibility. During the development process, the team ensured seamless integration of the application tracking feature with the existing infrastructure. The prototype showcases a user-friendly interface, allowing job seekers to access their application dashboard, view application statuses, and receive relevant notifications. The backend functionality includes updating application statuses, triggering notifications, and managing data synchronization.

By implementing the feature prototype, the project team has demonstrated the technical feasibility of providing a robust application tracking system within the "Connecting Jobs" platform.

4.4 Evaluation of the Feature Prototype

The effectiveness of the feature prototype is evaluated based on its performance and user feedback. Performance evaluations include measuring response times, system stability, and data accuracy. User feedback is gathered through usability testing, surveys, and interviews to assess user satisfaction, ease of use, and perceived value of the application tracking feature. The evaluation process helps identify strengths and areas for improvement.

4.5 Limitations and Areas for Improvement

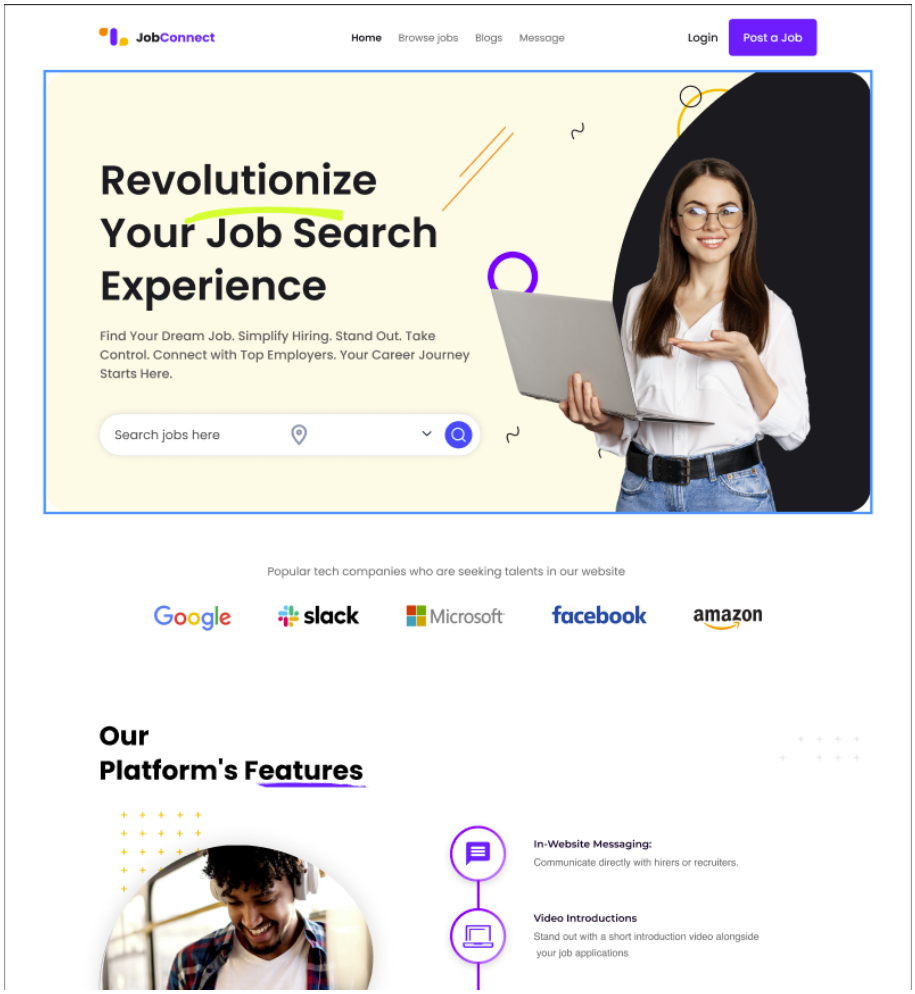
While the feature prototype demonstrates the functionality and feasibility of the application tracking feature, there may be certain limitations or areas for improvement. For example, the prototype might require further enhancements to improve its scalability for handling a large volume of applications. Additionally, gathering more extensive user feedback and conducting iterative testing can provide valuable insights for refining the feature and addressing user needs more effectively.

Efforts to address these limitations and improve the feature should be considered in future iterations, leveraging user feedback and technological advancements.

By describing the most important technical feature, explaining its functionality, demonstrating feasibility, evaluating its effectiveness, and discussing areas for improvement, this chapter provides an assessment of the feature prototype's capabilities and its potential impact on the "Connecting Jobs" platform.

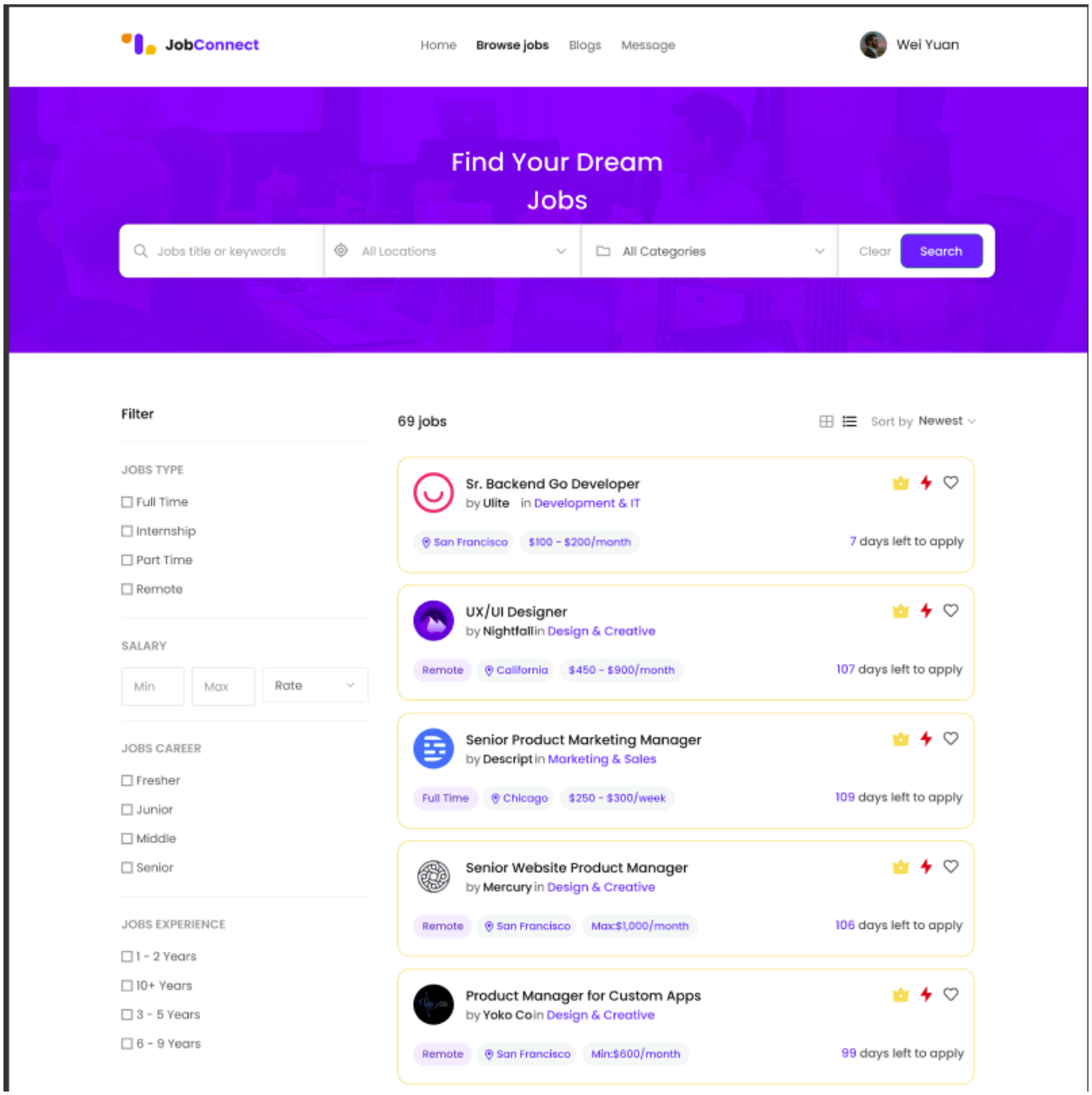
4.6 Figma and Prototype

HomePage
This is the first screen of my website. This is before the login page where users are still able to do a job search.


JobConnect
Home
Browse jobs
Blogs
Message
Login
Post a Job
Revolutionize Your Job Search Experience
Find Your Dream Job. Simplify Hiring. Stand Out. Take Control. Connect with Top Employers. Your Career Journey Starts Here.
Search jobs here
Popular tech companies who are seeking talents in our website
Google
slack
Microsoft
facebook
amazon
Our Platform's Features
In-Website Messaging:
Communicate directly with hirers or recruiters.
Video Introductions
Stand out with a short introduction video alongside your job applications

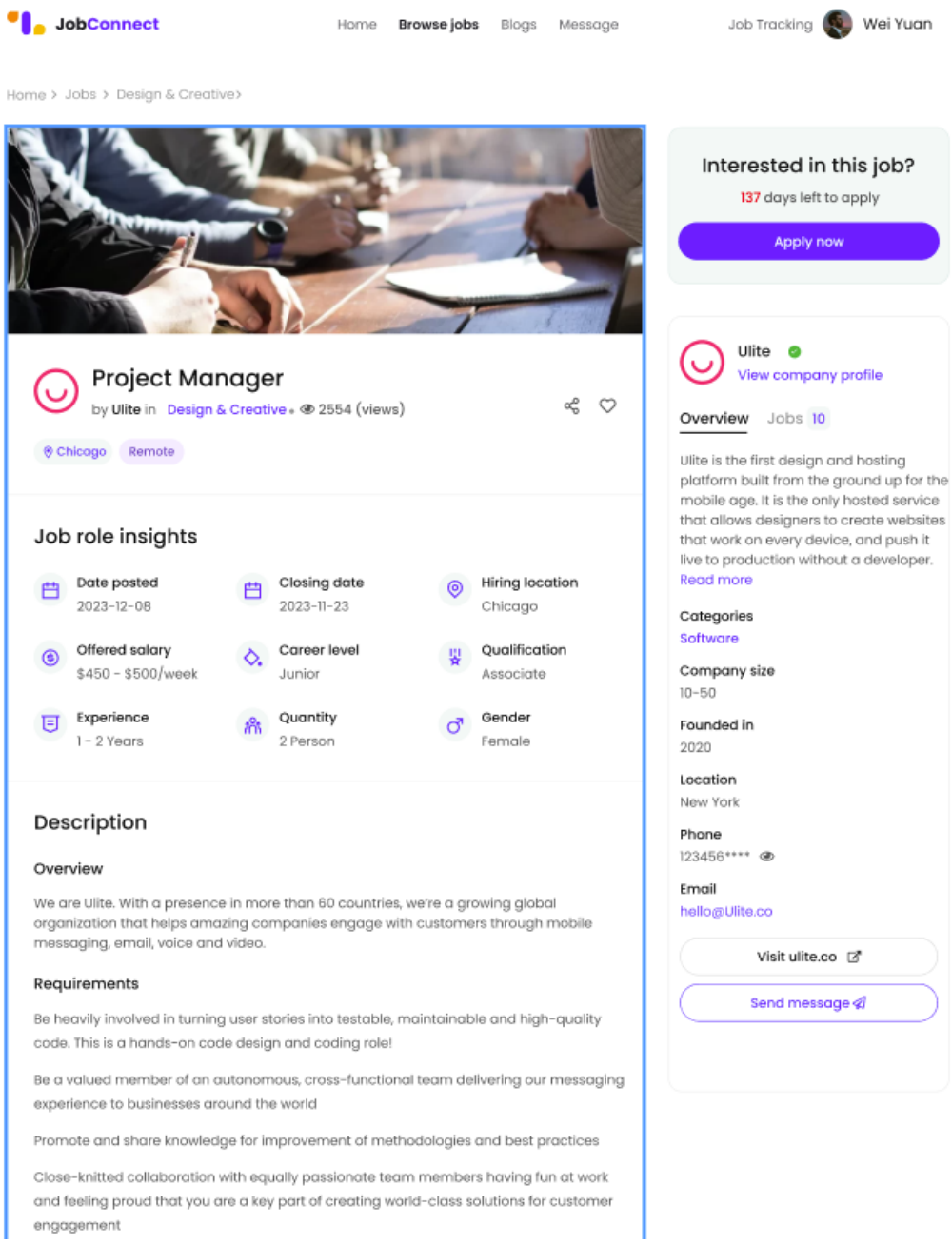
Job Search Page

This is the search page where users are able to browse through jobs. Users are able to search the job title, location and also different categories that will streamline down their job hunt. Other features including Job types, salary, experience will also be available in the filter section.



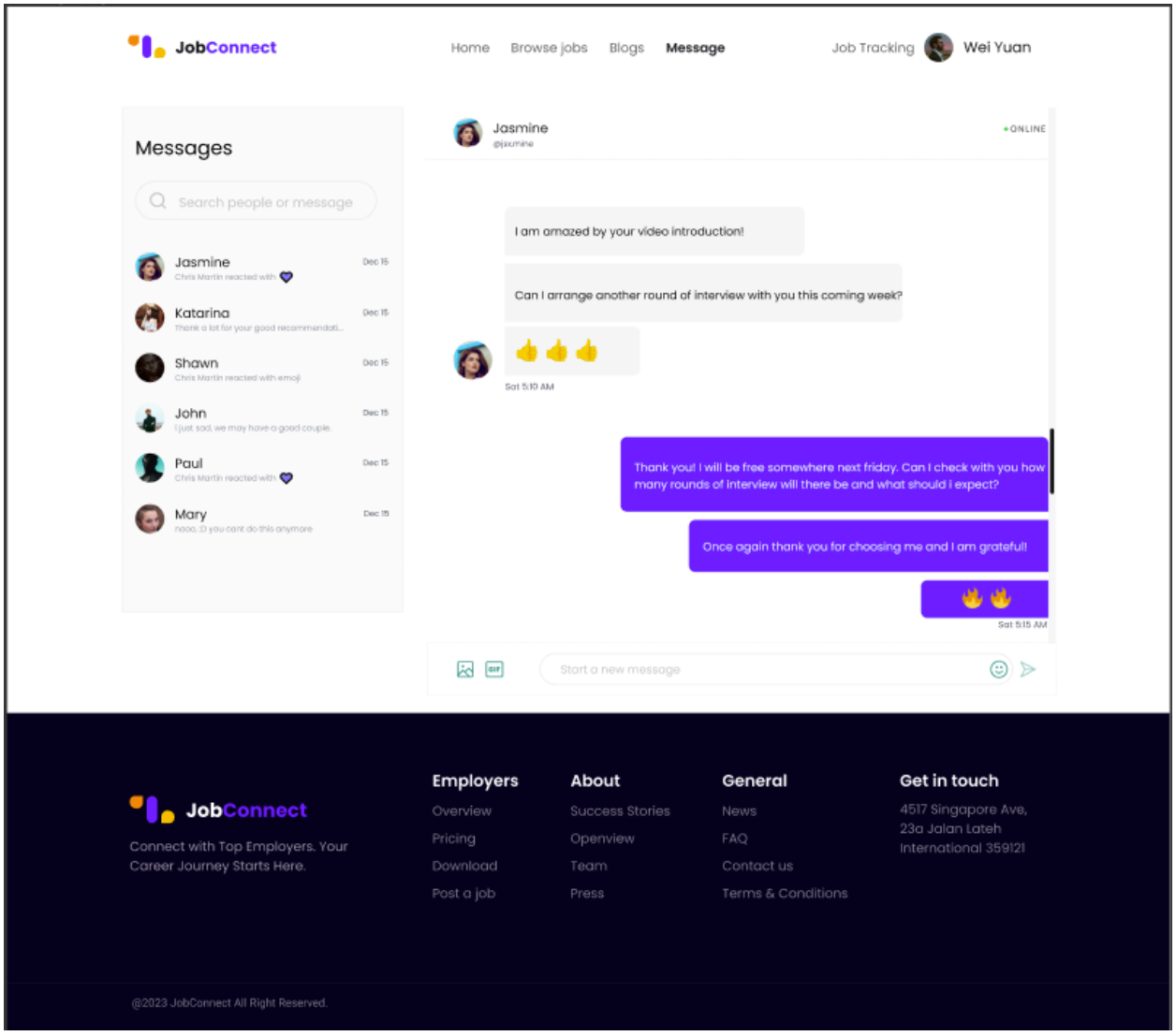
Browse Job Page

This is the browse job page after users click into one of the job openings. This page displays all the necessary information about the role and also the company's profile to understand better.



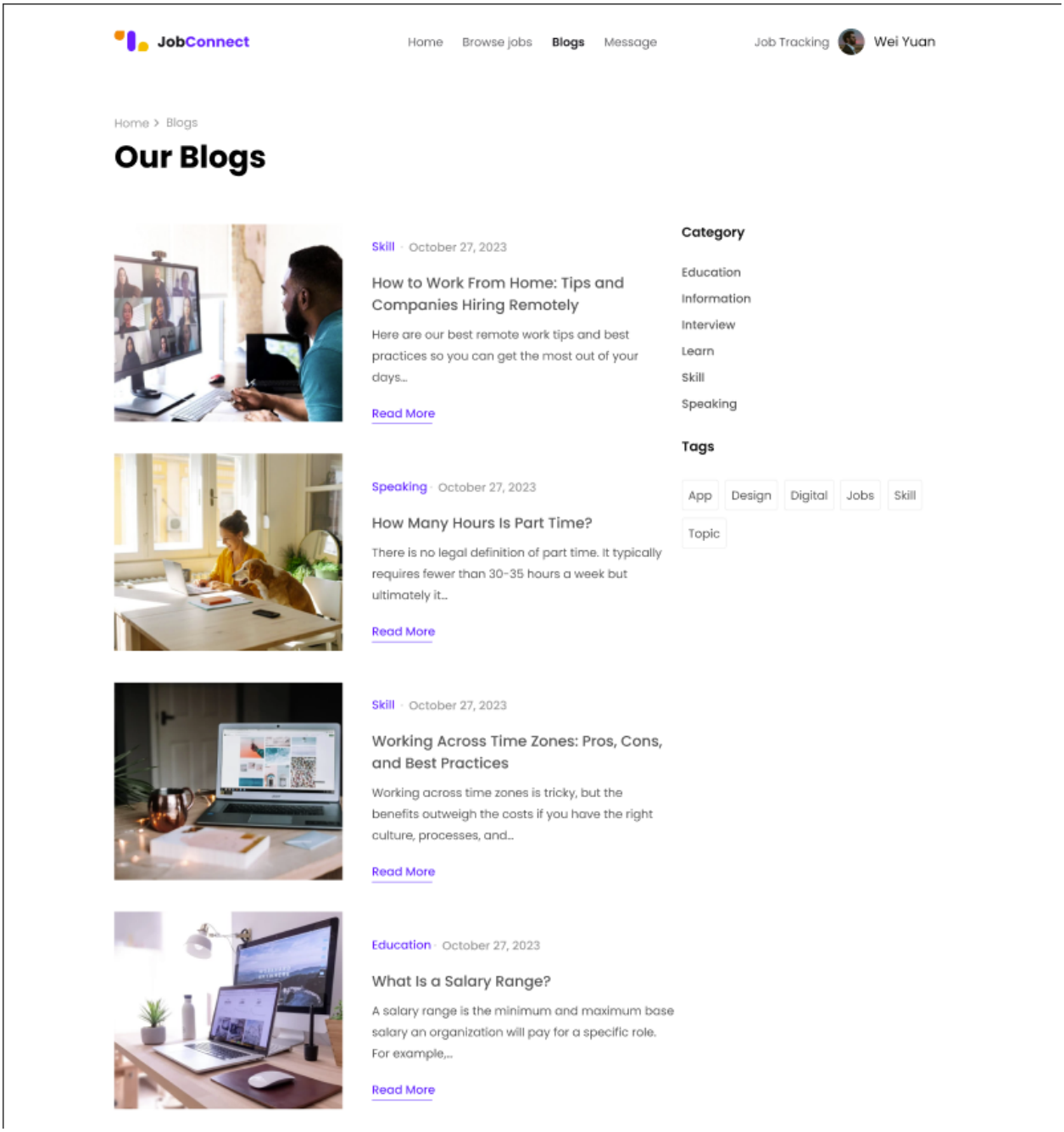
Messaging Platform

This screen shows the messaging platform where job seekers and recruiters can connect. This allows the communication to happen actively and significantly reduce troubles connecting with one another.



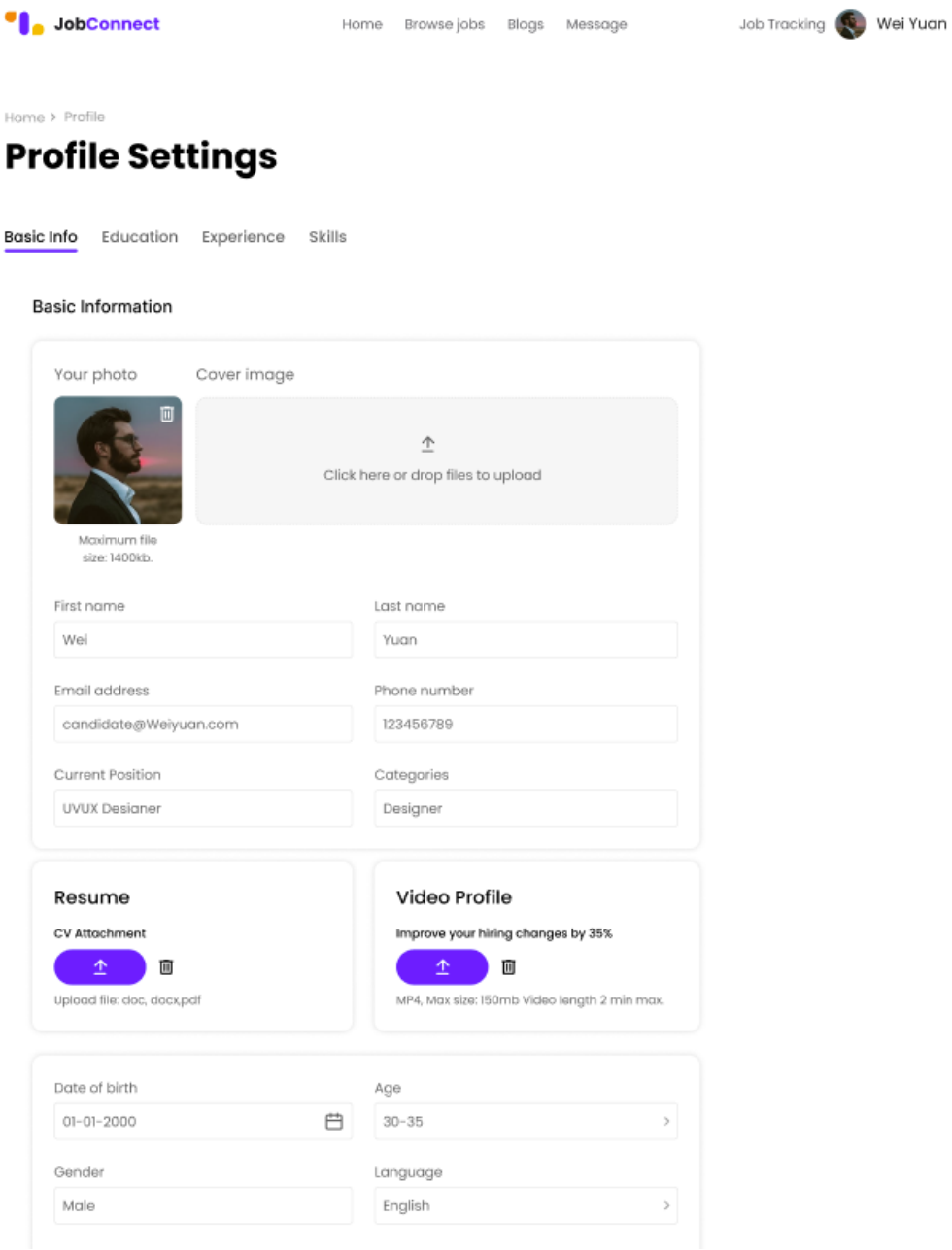
Blog

This is the blog page screen. In this section of the website, job seekers can learn various tips to score an interview as well as various good-to-know knowledge about the working society.



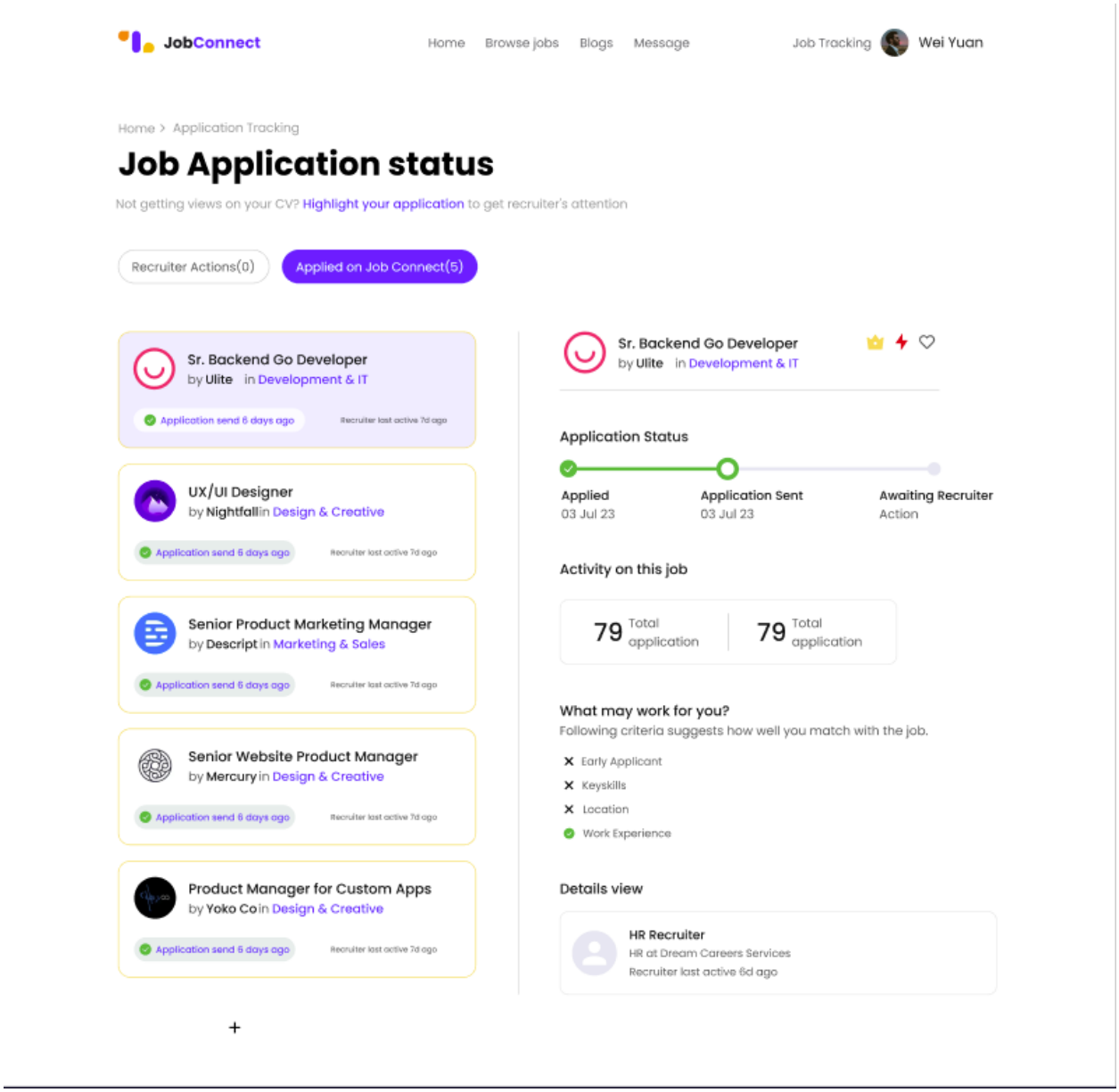
Profile Page

This is the profile page where job seekers update their particulars. Job seekers can upload their resume and also a video profile/introduction about themselves. These will allow recruiters to skip the introduction part of the hiring process and also increase the chances of job seekers to land an interview. There is also an education, experience and skills tab which will allow recruiters to understand job seekers' ability clearer.



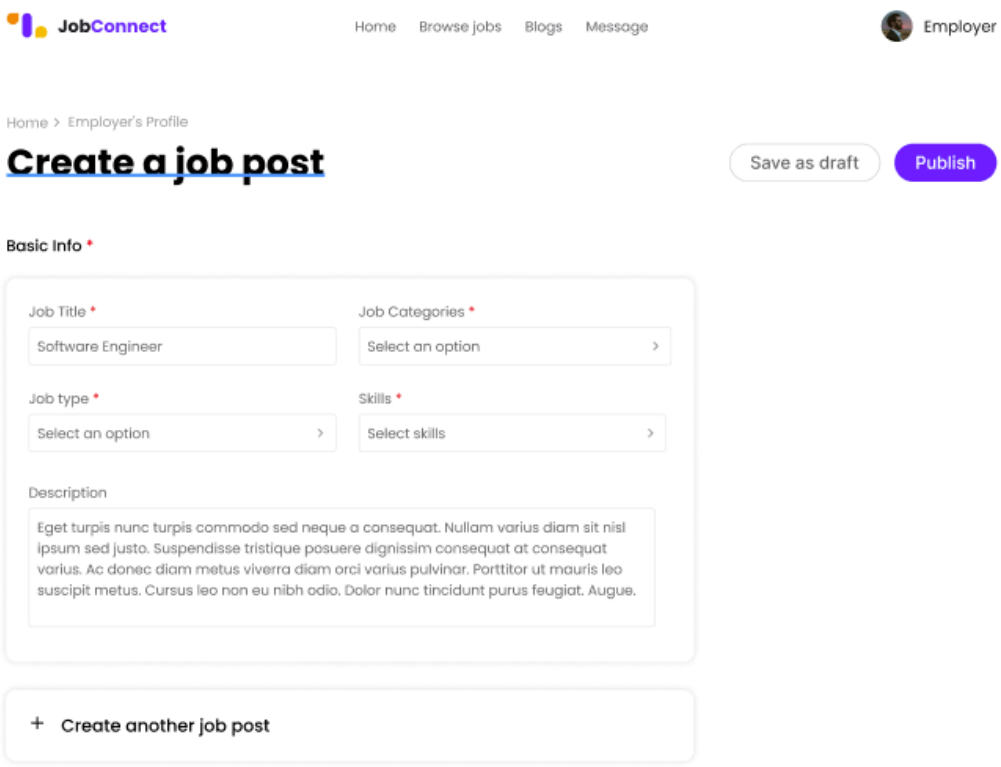
Job Tracking Page

This is the tracking page of the website. In this section, job seekers can see their application status such as application sent, reviewing of their application, and also if they are pending job interviews, status of job interview etc. This generally provides job seekers a better view of the job applicaiton process.



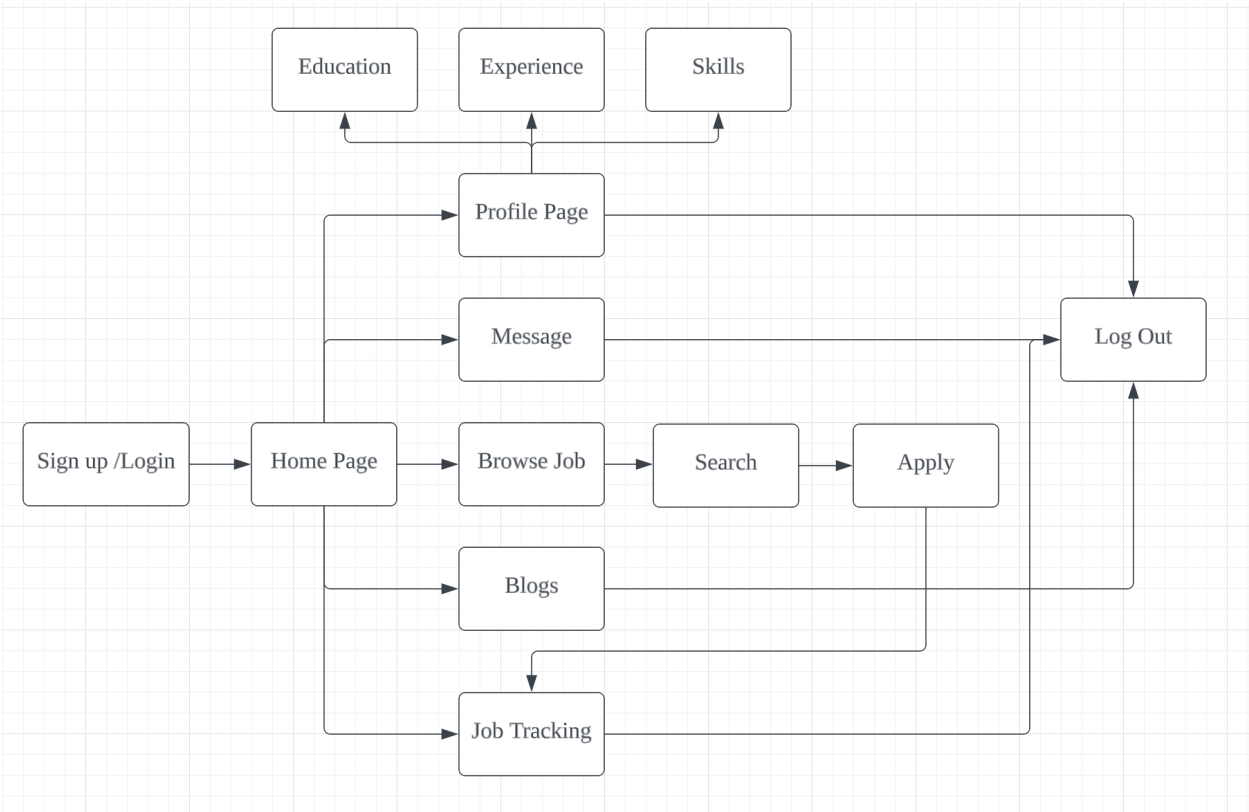
Job Posting Page

This is the job posting page screen. Recruiters will be able to post their job openings and it will be displayed in the browsing page.



Flow Chart

The picture belows shows the flowchart of JobConnect.



Chapter 5: Summary and Conclusion

5.1 User Testing and Feedback

Usability Testing: You can perform usability testing by acting as both the moderator and the participant. Define specific tasks or scenarios that users would typically undertake on the platform and simulate those interactions yourself. While performing the tasks, note any challenges, difficulties, or areas that could be improved. This self-conducted usability testing allows you to gain insights into the user experience and identify areas for enhancement.

Self-administered Surveys and Questionnaires: Develop online surveys or questionnaires using platforms such as Google Forms or SurveyMonkey. Share the survey link with potential users, such as friends, colleagues, or members of relevant online communities, and request their participation. The surveys can include questions about their overall satisfaction, ease of use, and specific feedback on features and functionalities. Analyze the responses to gain insights and understand user perspectives.

Self-conducted Interviews: Conduct interviews with individuals who are representative of the target user group. Prepare a set of interview questions that explore their needs, pain points, and suggestions for improvement. Document their responses and insights during the interviews. These one-on-one conversations provide valuable qualitative feedback that can inform design and development decisions.

Feedback Forms within the Platform: Implement feedback forms or in-app feedback mechanisms within the platform itself. This allows users to provide feedback, suggestions, or report any issues they encounter while using the platform. Capture and review the feedback received to identify areas of improvement and address any reported issues.

5.2 Significance and Potential Impact

The "Connecting Jobs" project holds significant potential in addressing the common problems faced by job seekers and employers in the job market. By providing a centralized and user-friendly platform with advanced features, such as application tracking, personalized job recommendations, and comprehensive employer profiles, the project streamlines the job search and hiring process, improving efficiency, transparency, and user experience. The platform has the potential to enhance job matching, reduce job search frustration, and facilitate meaningful connections between job seekers and employers.

5.3 Future Steps and Potential Enhancements

Looking ahead, there are several future steps and potential enhancements that can further elevate the "Connecting Jobs" platform. These include:

Iterative development and refinement based on user feedback: Continuously gathering user feedback and incorporating iterative improvements to enhance the platform's usability and effectiveness.
Integration of machine learning algorithms: Implementing machine learning techniques to provide more accurate and personalized job recommendations based on user preferences and qualifications.
Expansion of employer profiles: Including additional information about company culture, values, and employee reviews to offer job seekers deeper insights into potential employers.

Collaboration with industry partners: Partnering with companies and organizations to establish connections and integrate their job listings, increasing the diversity and quantity of opportunities available on the platform.

5.4 Reflection on the Development and Research Process

Throughout the development and research process, valuable insights and lessons have been gained. The project has provided an opportunity to apply technical skills, knowledge of user-centered design, and understanding of industry trends. Challenges faced during the development process, such as balancing performance and aesthetics or integrating complex features, have resulted in valuable learning experiences. The project has also highlighted the importance of continuous user engagement, usability testing, and iteration to create a platform that meets the needs and expectations of its users.