in collaboration with

Softwarica
College of IT & E-commerce

Coventry University

ST6002CEM-Mobile Application Development

Project proposal

on

The Job Finder

THE JOB FINDER

CONNECTING YOU TO YOUR
NEXT CAREER OPPORTUNITY.

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Introduction

Project Introduction

The Job Finder is a mobile application designed to help job seekers find suitable employment opportunities and for employers to get the word to employees easily. This application will enable users to search for jobs based on location, industry, and job type. It will also allow employers to post job vacancies and review the resumes of potential candidates. The job finder is projected as a user-friendly and easy solution that takes advantage of modern technologies to enhance the job search experience.

Justification of the Project

Background

The job market can be overwhelming, especially for those new to the workforce or recently lost jobs. Job seekers often struggle to find suitable job vacancies that match their skills and interests. On the other hand, employers may find it challenging to attract qualified candidates to their company. Traditional job search methods often tend to be tedious and time-consuming for both job seekers and employers. By creating a mobile app that eradicates those pain points, we aim to revolutionize the job search experience and make the process easier.

Problem statement

The Job Finder seeks to address the current challenges by providing a platform for job seekers to find relevant job vacancies and for employers to attract and review potential candidates. The application aims to streamline the job search process and create a more efficient way for job seekers and employers to connect.

Description of the Project

Features

The Job Finder will include the following features:
- Job search: Users can search for jobs based on location, industry, and salary. They can also save their search preferences and receive job alerts.
- Job posting: Employers can post vacancies, review resumes, and communicate with potential candidates.
- Resumes: Job seekers can upload their resumes, which can be reviewed by potential employers.

- Notifications: Users can receive notifications when new job vacancies are posted, and their applications are reviewed.
- User profiles: Job seekers can upload attractive CVs which are sent to employers when the user applies for a job.

App Monetization

The Job Finder will follow a freemium model, offering basic functionalities to users for free while providing premium features for a subscription fee in the future. Premium features may include advanced job matching, priority listing for employers, and enhanced profile visibility for job seekers. Other than the subscription model the app can also bake in ads forcing users to see ads every time they are accepted for a job. Ads will only work when there is a massive following of the app. This monetization strategy aims to balance the needs of both job seekers and employers while generating revenue to sustain the platform's development and operation.

Comparison to Similar App

A similar app in the market is "JobFinder.com" which also focuses on connecting job seekers with job opportunities. However, The Job Finder distinguishes itself in several key ways:
- Resumes: Job seekers can upload their resumes, which can be reviewed by potential employers.
- Job posting: This is the major difference between other Job Finder. There is no other application that allows any user to add job listings.

Cloud Computing in Mobile App Development

Cloud computing plays a pivotal role in mobile app development for several reasons:

- Scalability: Cloud platforms provide scalable resources, allowing mobile apps to handle varying user loads without the need for significant upfront infrastructure investments. This scalability ensures that the app can accommodate increasing user demand without performance issues.

- Cost-Efficiency: Cloud services follow a pay-as-you-go model, enabling mobile app developers to optimize costs. They only pay for the resources they use, reducing the need for expensive hardware and maintenance.

- Global Reach: Cloud services enable mobile apps to be accessible globally. Data centres distributed across the world help deliver content to users with low latency, ensuring a smooth user experience regardless of their location.

- Data Storage and Management: Cloud storage solutions provide reliable data storage, backup, and recovery mechanisms for mobile apps. This is crucial for storing user data securely, especially in cases where local storage might be limited or unreliable.

- Collaboration and Development: Cloud platforms facilitate collaborative development among distributed teams. Developers can work on the same codebase, share resources, and leverage cloud-based development tools, making the development process more efficient.

- Ease of Deployment: Cloud services simplify app deployment, allowing developers to push updates and new features seamlessly. This rapid deployment cycle is critical for keeping the app up-to-date and responding to user feedback promptly.

Big Data in Mobile App Development

Big Data has a significant impact on mobile app development due to the following reasons:

- Personalization: Big Data analytics enables mobile apps to gather and analyze vast amounts of user data. This data helps create personalized user experiences by understanding user preferences, behaviours, and patterns.

- Real-Time Insights: Big Data tools allow mobile apps to process and analyze data in real time. This capability is valuable for apps that require real-time insights for decision-making, such as location-based services or stock trading apps.

- Enhanced User Engagement: Big Data helps mobile apps understand user engagement patterns, enabling developers to optimize the app's UI/UX, content, and features. This leads to increased user retention and satisfaction.

- Predictive Analytics: Big Data allows mobile apps to use predictive analytics, enabling them to anticipate user needs and provide relevant recommendations. This enhances the app's value and user engagement.

- Performance Optimization: By analyzing app performance data, developers can identify bottlenecks and areas for optimization. This ensures that the app runs smoothly and efficiently, leading to a better user experience.

- Monetization Opportunities: Big Data insights can reveal valuable information about user behaviour, which can be leveraged for targeted advertising, subscription models, or other monetization strategies.

Aims and Objectives

The project aims to create a user-friendly mobile application that simplifies the job search process for job seekers and provides an efficient platform for employers to post vacancies and review potential candidates.

The objectives of the project are as follows:
- To create a database of job vacancies that can be searched and filtered by users.
- To provide a platform for employers to post job vacancies and review potential candidates.
- To create a user-friendly interface for job seekers to search and apply for jobs.
- To provide a resume builder that allows job seekers to create and upload their resumes.
- To create a messaging system that enables communication between job seekers and employers.

MVVM Design Pattern

The Model-View-ViewModel (MVVM) design pattern will be used in the development of The Job Finder application. This design pattern separates the user interface from the business logic and data handling, making it easier to test and maintain the code. The MVVM design pattern also allows for better scalability and flexibility in the application architecture.

State Management in Mobile App Development using Riverpod

State management is the process of efficiently managing and controlling the state, data, and UI of a mobile application to ensure a consistent and responsive user experience. Proper state management is crucial, especially in complex apps, as it helps maintain data integrity, synchronizes UI updates, and ensures that the app behaves predictably.

For "The Job Finder" app, I have utilized the Riverpod state management library to handle the app's state. Riverpod is a modern, provider-based state management solution developed by the Flutter team. It's designed to work seamlessly with Flutter, providing a simple and efficient way to manage the app's state and handle changes across various components.

Riverpod in "The Job Finder" App

In "The Job Finder" app, Riverpod has been instrumental in managing the following aspects of the app's state:

- User Preferences: Riverpod is used to store and manage user preferences, such as search criteria, filters, and saved job listings. This ensures that users have a consistent experience across different app screens, and their preferences are maintained even if they navigate between different sections of the app.
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- Search Results: The app uses Riverpod to store and update the current search results. When users perform a job search, the search results are stored in a Riverpod provider, allowing the app to display the most up-to-date job listings and respond to user interactions efficiently.
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- Selected Job Listing: Riverpod is employed to manage the state of the selected job listing. When a user taps on a specific job listing for more details, the selected job's information is stored in a Riverpod provider, ensuring that the app displays the correct job details consistently.
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- UI Updates: Riverpod efficiently handles UI updates. When the state of the app changes (e.g., new search results, user preferences updated), the relevant UI components are automatically notified and updated, reflecting the changes in real time.
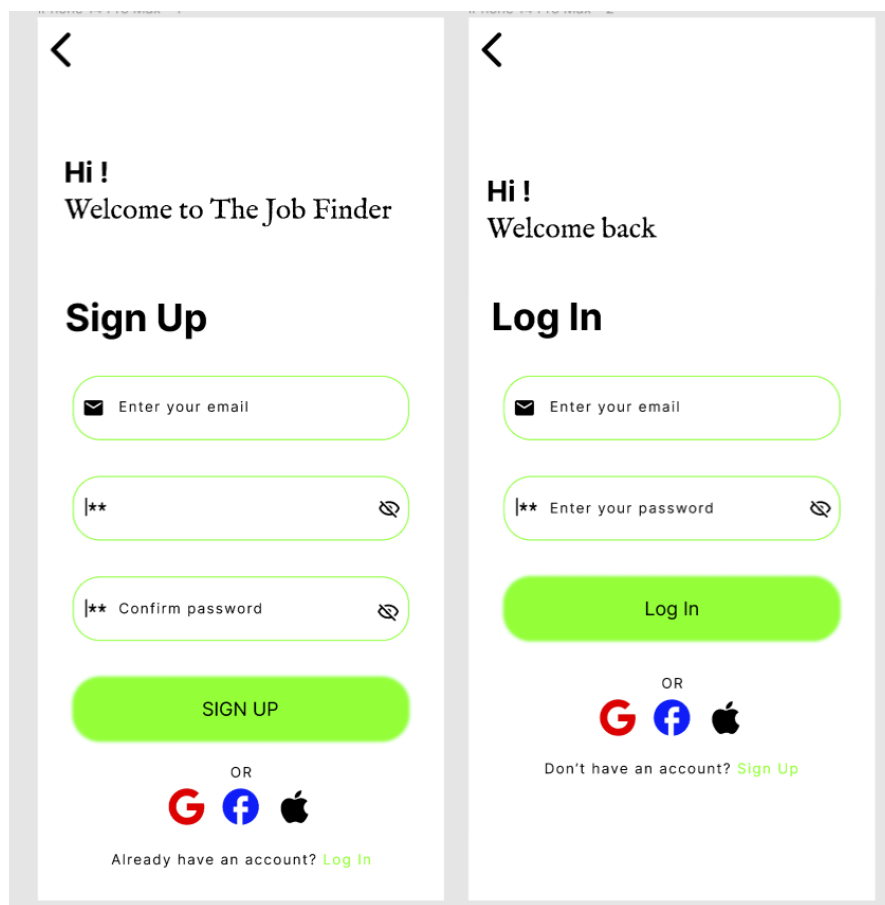
Configuration Management

GitHub link

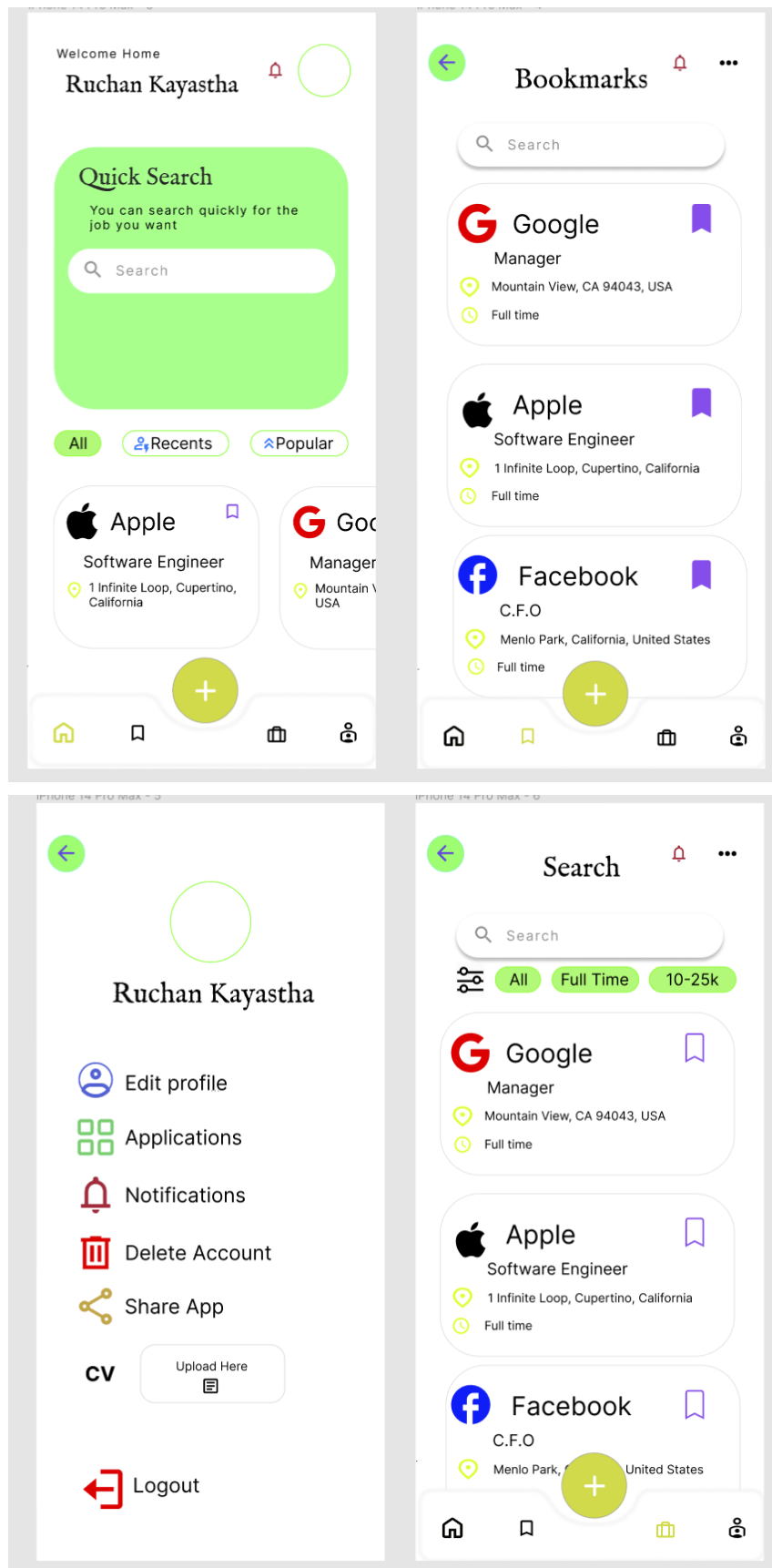https://github.com/SoftwaricaCollege/final-assignment-Ruchan10
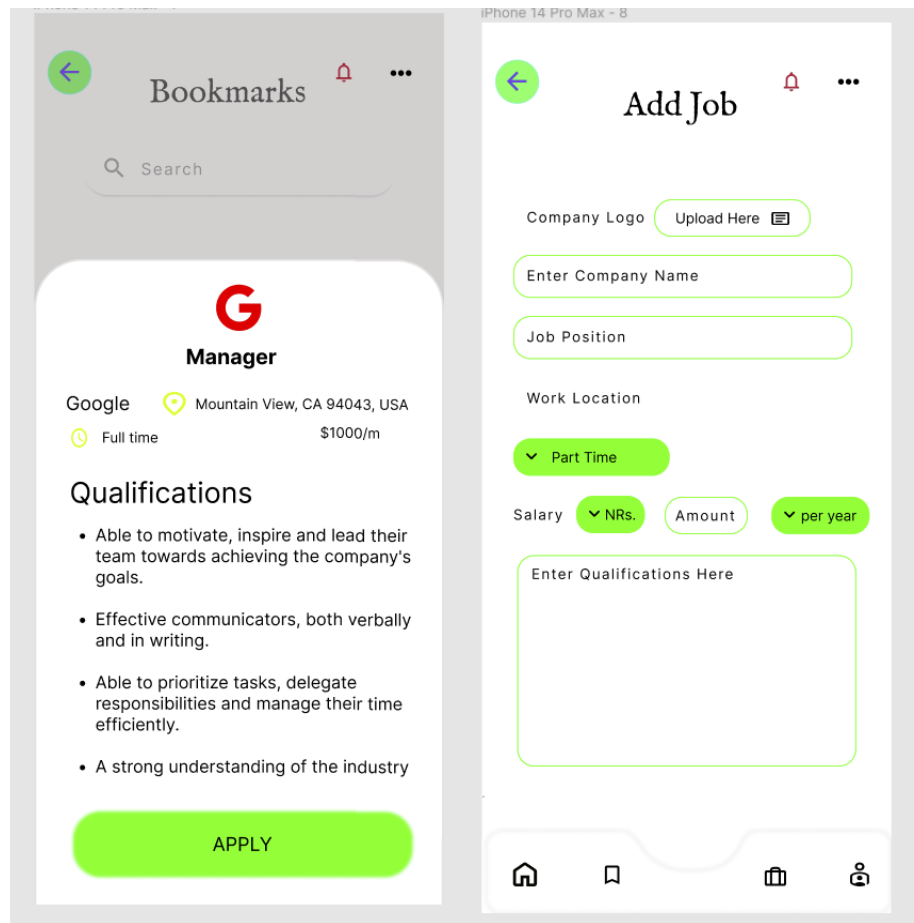
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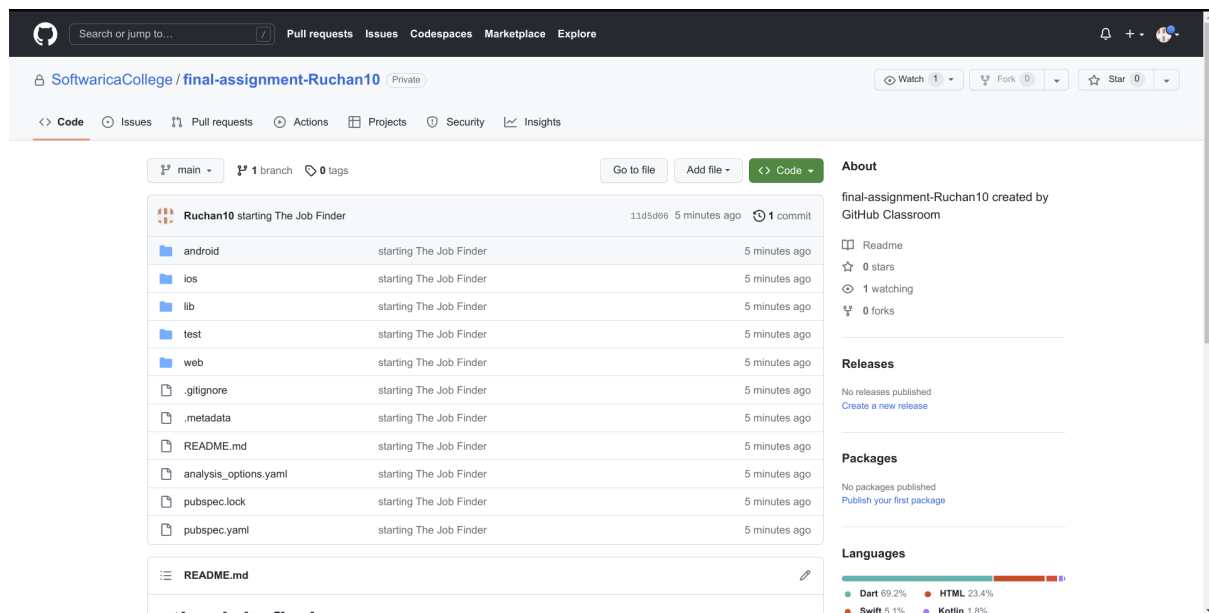
Prototyping

Conclusion

The Job Finder is a mobile application that aims to simplify the job search process for job seekers and provide an efficient platform for employers to post vacancies and review potential candidates. The application will be developed using the MVVM design pattern and stored in a GitHub repository. Prototyping will be done using Figma or Adobe. The project seeks to streamline the job search process and create a more efficient way for job seekers and employers to connect. By providing a user-friendly interface and innovative features such as job search, job posting, and messaging, The Job Finder will help users find suitable job opportunities and employers to attract qualified candidates to their vacancies.

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