

**YOUR JOBS: AN ANDROID APPLICATION FOR FIND JOBS AND INTERNSHIP  
PROGRAM**

**BY**

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of  
Bachelor of Science in Computer Science and Engineering

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

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## **APPROVAL**

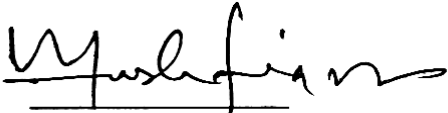
This Project titled “Your Jobs” An android application for find jobs and internship program easily, submitted by **Dinokar Halder** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on **15-July-2024**.

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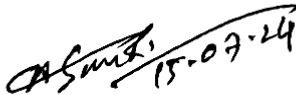
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## DECLARATION

I hereby declare that this project has been done by me under the supervisor of **Md. Sazzadur Ahamed, Assistant Professor, Department of CSE** Daffodil international University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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Lastly, I must respectfully thank my parents for their ongoing assistance and patience.

## **ABSTRACT**

The project “YOUR JOBS”: AN ANDROID APPLICATION FOR SEARCHING JOB AND INTERNSHIP PROGRAM. Focuses on how beginner candidate easily find an internship program and a new job for apply. It might be difficult for job seekers to quickly identify acceptable employment prospects in today's competitive work market. The goal of this project is to create an Android application that makes it easier for job seekers to look for and locate employment circulars. The program fills the demand for a single location from which users may browse a variety of job advertisements from different industries. A user-friendly interface for searching employment based on various criteria, real-time notifications for new job postings, and the ability to save and monitor job applications are the main goals of the program. I utilized Visual Studio, Figma for UI design, a mobile phone, an emulator for testing, Firebase as a database, and Flutter and Dart as programming languages to construct this app. After implementation, I conducted numerous tests on this program, and the results were overwhelmingly positive. This software's features for beginner candidate communication and information are straightforward, easy to use, and smooth. So, it is easily usable by everyone. The project's anticipated results include improved job search speed, a smoother user experience thanks to an intuitive interface, and a greater success rate for user job placements. With this single platform, the application hopes to become a must-have resource for job seekers by combining employment circulars.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

It might be difficult for job seekers to find relevant job opportunities in today's ever-changing employment environment. The job search process may easily become complicated and time-consuming due to the abundance of job posting websites, company career pages, and recruiting agencies. Finding a centralized platform that compiles job circulars from multiple sources so that job hunters may conduct focused and effective searches is a common challenge for job seekers. We suggest creating an Android app to simplify the job search process in order to overcome this difficulty. This application will function as a thorough platform that enables users to quickly look for job postings in a variety of areas and businesses. Our program seeks to streamline the job search process and assist job searchers in more efficiently finding opportunities that fit their needs by combining job posts into a single, user-friendly interface. Our software will have tools for collecting and storing job applications, real-time notifications for new job posts, and sophisticated search features. With the help of these tools, users will be able to manage their applications with ease, stay current on job prospects, and perform effective job searches. In conclusion, our Android app will provide a consolidated and effective platform for locating employment circulars, thereby delivering a strong response to the problems encountered by job searchers. This introduction lays the groundwork for a thorough examination of the goals, process, and anticipated results of the application. Upon registering, users will have access to all features contained in the database. The database can only be viewed by authenticated users who completed an email registration process for data security reasons. Access to the application will be denied to users who do not have a valid email address or login. The job recommendation software will assist in selecting the positions given by different firms in a number of ways. It will be beneficial for job seekers to quickly and simply highlight their qualifications and talents and land suitable positions. This lessens their headache of having to squander time gathering information about employment offers and recruiters' requirements. Employers find that the hiring process is simplified because they have access to detailed information about each candidate's special talents.

## **1.2 Motivation**

The present job search procedure is becoming more difficult and inefficient, which is why “YOUR JOBS” Android application for job circular searches was developed. It can be challenging to swiftly and effectively locate suitable job opportunities in the digital era due to the deluge of job portals, company websites, and recruiting agencies. Many of the problems with current job search platforms include out-of-date job listings, restricted search options, and a dearth of customized alerts. Because of these difficulties, job searchers have a difficult and time-consuming time searching through numerous websites and applications in search of suitable positions. Additionally, users miss out on possible job chances when there is no central platform, which prolongs the job search process. In order to overcome these difficulties, the suggested program offers a thorough and intuitive platform that compiles job circulars from multiple sources. The application will greatly improve the efficacy and efficiency of the job search process by providing tools for managing job applications, real-time notifications, and advanced search functions. Personally, I've seen how difficult it can be for friends and relatives to find jobs, which has made me realize that there has to be a better way. Due to their experiences, existing job search platforms have deficiencies that have been brought to light, which has motivated the development of an application that can fill these gaps. Our objective is to equip job searchers with the necessary resources to locate employment possibilities efficiently and quickly by centralizing the job circular platform. In conclusion, the goal of this project is to streamline the job search procedure, cut down on the time and effort needed to locate opportunities that fit, and enhance users' overall job-seeking experience. This incentive spurs the creation of a novel remedy that overcomes the drawbacks of the platforms and techniques now used for job searching.

## **1.3 Objectives**

### **1. Develop a Comprehensive Job Search Platform:**

- Create an Android application that aggregates job circulars from various sources, providing a centralized platform for job seekers to find relevant job opportunities easily.

### **2. Enhance User Experience:**

- Design a user-friendly interface that simplifies the job search process, allowing users to navigate the application with ease and find job postings efficiently.

### 3. Implement Advanced Search Capabilities:

- Integrate advanced search functionalities, enabling users to filter job listings based on criteria such as location, industry job title and experience level.

### 4. Provide Real-Time Notifications:

- Offer real-time notifications to alert users of new job postings that match their preferences, ensuring they are promptly informed about the latest opportunities.

### 5. Enable Job Application Management:

- Develop tools for users to save, track, and manage their job applications within the app, helping them stay organized and monitor the status of their applications.

### 6. Improve Job Search Efficiency:

- Reduce the time and effort required for job seekers to find suitable job openings by consolidating job circulars into a single platform and providing efficient search and notification systems.

### 7. Ensure Accessibility:

- Incorporate features such as adjustable font sizes, language option, and a clean design to make the application accessible to a broader audience, including users with different needs and preferences.

### 8. Foster Employer Engagement:

- Create Functionalities that allow employers to post job openings directly on the platform, fostering a connection between employers and potential employees.

### 9. Support Career Development:

- Include resources such as resume-building tools, interview preparation guides, and career advice to support users in their job search and career development.

### 10. Maintain Data Security:

- Implement robust security measures to protect user data and ensure the privacy and confidentiality of personal information.

By achieving this objectives, “YOUR JOBS” Android application will provide a comprehensive, efficient, and user-friendly solution for job seekers, ultimately facilitating successful job placements and enhancing the overall job search experience.

## 1.4 Expected Outcome

The application is expected to enhance the overall job search experience by providing a user-friendly interface, advanced search capabilities, and real-time notifications. Users will be more satisfied and engaged as a result of being able to locate job ads that suit their tastes quickly and effectively. Feedback systems, which are reliant on user input, will guarantee ongoing progress. The program will expedite the job search process by combining job circulars from several sources onto a single platform, thereby saving time and effort in locating pertinent employment opportunities. Users will identify relevant opportunities more quickly with the aid of tailored suggestions and advanced filtering tools, which will further boost the efficacy of the job search. The app's distinctive characteristics, which solve the drawbacks of current platforms, position it to have a big influence on the job search industry. It will have a competitive edge because of its thorough method of compiling job listings, real-time notifications, and user-friendly design. Employers and job seekers alike will utilize the program in large numbers. It is anticipated that the application will continue to help companies, job searchers, and the labor market as a whole in the long run. Employers will have access to a wider pool of individuals, while job seekers will have a dependable tool for locating openings. In order to maintain the application's usefulness and relevance in the future, it will be updated often with new features and enhancements based on user input and industry trends. The project's anticipated results demonstrate its ability to completely transform the job search procedure.

### Primary Outcome:

1. Users can easily search jobs conveniently through their qualification and experience level.
2. Users can upload all their information like their contact info, qualified certificate, experience level, and their authorized recommendation letter.
3. Communicating with the employer and job seekers through the use of the application “Your Jobs” is possible using the email option.
4. Job seekers will be able to find all job circular in one app.
5. Job seekers can directly apply any type of job using this application.
6. This application will save users time, complexities, and hassle

## 1.5 Report Layout

Chapter 1: Here is a description of the introduction about the application, the motivation behind developing this project, the objective of the application, and the Expected Outcome I expect to achieve from my project. The report layer of this chapter are also discussed in the last part.

Chapter 2: Background work of my project including the preliminaries of the project, related work and their features, comparative studies with other existed work scope of the problem, and challenges I faced all are mentioned in this chapter.

Chapter 3: In this chapter, I discussed all the requirements of this project like the business processing model which is a model of mapping concept and how a project work, Requirement collection, and analysis, how I collect the requirement and analyze them, use case model of the project, Logical data model that is a relational table all are discussed properly in this chapter.

Chapter 4: Design specifications are discussed in this chapter. How I designed all the project work including front-end design, UX design, and Back-end design is explained in this chapter. Also, implementation requirements for developing this project are also discussed here.

Chapter 5: In this chapter, I explained the implementation of the database. Which database I choose, and how I implement that database in my project all are mentioned there, implementation of front-end design which can give a brief knowledge of how I implement the Front-End and which tools I have used are discussed. After the implementation testing process on how I implement testing and the result of the testing report are also in this chapter.

Chapter 6: It helps to know about the project's impact on society. Here is also discussed the impact of this project on the environment and how it can help in sustainability.

Chapter 7: It is the last chapter where I discussed the conclusion of this total project development and the application "Your Jobs". Also, there are lots of future work scope to develop this project further in the future are also discussed in this chapter.

## **CHAPTER 2**

### **BACKGROUND**

#### **2.1 Preliminaries**

It is essential to conduct prior research to identify any gaps, facilities offered in the application, etc. Before beginning the development process of any application. In order to address this, I must research the relevant field and project data. In order to create a special and more successful project, I decided to create it and also do a focused study on comparable projects and earlier work. This section is actually crucial to finishing a job successfully or effectively. Thus, I must first ascertain whether or not someone has already completed a job of this kind. My search turned up a few relevant apps on the Google Play Store and Google Sites. I then make an effort to identify and draw attention to the initiatives' shortcomings. And finally, I built a better application for job seekers to find a suitable job and apply easily. Without having research knowledge about related works, anyone can't figure out the ideas on existing features of the related projects. So, they may have very few points of scope to improve or utilize existing features limitations and add new ones. That is why, the background of the project plays a fundamental role to build a successful project.

#### **2.2 Related Work**

There are some similar kind of related applications. Most of them have limited features like users profile with only their details including their educational qualification. But they didn't provide real time job circular for apply and find job easily. "Your Jobs" also provide internship program and mentorship for new job seekers.

Some platforms for finding job and apply related applications are:

- LinkedIn[1]
- Skill Jobs[2]
- BD Jobs[3]
- Job Island[4]
- Chakri.com[5]
- Post Job Free[6]

## Opportunities for Improvement:

- **Enhanced Search Capabilities:**  
Provide customers with the ability to refine job postings according to particular parameters, including experience level, area, and income range, by using sophisticated search filters.
- **Real-Time Notifications:**  
Assist users with finding new jobs that fit their interests by sending them real-time job alerts.
- **User Friendly Interface:**  
Design an intuitive and modern interface that enhances user experience and simplifies navigation.
- **Comprehensive Job Management:**  
Include Features for users to save, track, and manage job applications within the app.
- **Integrated Company Insights:**  
Combine job listings with company reviews, salaries, and interview experiences to help users make informed decisions.

Numerous advantages and disadvantages of the current job search platforms are shown by investigation. Although sites like Skill jobs, BD jobs, Chakri.com, LinkedIn, and so forth provide useful capabilities, there are some obvious shortcomings and room for development. The suggested Android application can improve users' entire job search experience by fixing these flaws and offering a more effective, user-friendly, and thorough job search experience.

## 2.3 Comparative Studies

The comparative analysis identifies the benefits and drawbacks of the current job search tools. The suggested Android application may differentiate itself from other products on the market by filling in the gaps and taking advantage of the chances. The application “Your Jobs” has so many features and functions. Some of them are similar and some are different compared to the mentioned applications. In addition, I have developed the application “Your Jobs” with full information which is more user-friendly, easy to understand, and convenient to users who searching for a job for apply and get an internship program with a proper mentorship.

## Competitor Analysis:

| Criteria              | LinkedIn                         | Skill Jobs                             | BD Jobs                            | Chakri.com                    |
|-----------------------|----------------------------------|----------------------------------------|------------------------------------|-------------------------------|
| UI and UX             | Professional but complex         | Simple and clean                       | Informative but cluttered          | Outdated and less intuitive   |
| Search Capabilities   | Good, with recommendations       | Extensive database, limited filters    | Decent, with company insights      | Basic, less precise           |
| Notifications         | Personalized job alerts          | Job alerts, less personalized          | Job alerts with company reviews    | Job alerts, less frequent     |
| Job Management        | Tracks applications, connections | Saves jobs, tracks applications        | Tracks applications, reviews       | Saves jobs, basic tracking    |
| Additional Features   | Networking, career insights      | Salary estimator, company pages        | Company reviews, salary info       | Resume builder, career advice |
| Performance and Speed | Generally good, occasional lags  | Fast, sometimes slow on search         | Moderate, occasional delays        | Moderate, can be slow         |
| User Feedback         | Positive, but some UI complaints | Mixed, praises database, lacks filters | Positive for reviews, mixed for UI | Mixed, interface complaints   |

## 2.4 Scope of the Problem

There are lots of problems that I faced to complete this project properly. But after those difficulties, I have overcome and made it possible to build a smooth and standard project. I need to know where I can find the data set of newer job circular for that I collected job circular in many company web site and newspaper. Database choice is also a crucial decision. So I've decided to utilize Firebase as my database. As an editor, I worked in Visual Studio. I have developed in two programming languages: Flutter (framework) and Dart. I have stored data in a database using Firebase and SQL. To create this application, I utilized a few Dart library functions. I have opted for this programming language due to its ease of use for developers and its cross-platform availability for free. It has an abundance of tools and widgets to create stunning and quick programs for Google Fuchsia, Windows, Mac, Linux, iOS, Android, and the web. Because this website is so easy to use, I'm hoping that both instructors and students will make use of this kind of program, which will simplify things.

## 2.5 Challenges

There are some challenges I faced to complete the project successfully are mentioned below:

- The use of the firebase as a database was new for me. I needed to learn a lot with huge effort about this database to implement it in my project properly.
- To create a beautiful user-friendly design and unique and exclusive features.
- To develop a feature which is signing through a Gmail account was a bit difficult for me to implement.
- Handling two users profile in one application.
- Ensuring data security of the information was a challenging phase too.
- Blocking unauthorized users who don't have valid mail and certificate from accessing or deleting information from database.

## CHAPTER 3

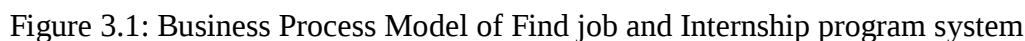
### REQUIREMENT SPECIFICATION

#### 3.1 Business Processing Model

Business Process Model is a flowing diagram or model to build a project or system. It is a mapping concept that defines the actual flow of data. In this process, we can create a structural view of a process or system.

In this figure 3.1 we can see the business process model for the application “Your Jobs”.

Users have to sign-up or log-in to the system with a valid mail for get access to the features of the system. Outsider without valid mail account user can't be able to create an account on this system. After log in to the system users can search for a profile and if it's in the database they will find that profile. Users can view and search new posted job circular and also they can easily apply their suitable job compare their qualification. User can also update their profile and upload their qualified certificate for get a suitable job. On the other hand user also upload their profile picture for create a complete profile. Admin can control the database of every user's profile.



In order to finish a project flawlessly and increase its use, requirement analysis and collection are crucial. In order for a project to progress, it must meet two kinds of requirements. It is important to complete both functional and non-functional requirements before beginning any project. Non-functional requirements explain the behavior and efficiency of the program, whereas functional requirements are essentially a procedure that determines how the application operates. I need to gather certain requirements for the first work before I can begin developing the project. To develop a graphical depiction of the project, requirements must be gathered. I had a great deal of difficulty gathering and analyzing the required information. Because I had the opportunity to gather the

necessary data by myself. I did a lot of research for this kind of assignment since I have to make sure that all the material is accurate, so I gather information from reliable sources. In addition, I have to be responsible and mindful of gathering requirements. I gathered data and conducted searches across several sources. I searched websites and applications of similar type projects called finding new job opportunities and mentorship with employers and job seekers by this app that provide new job for job seekers.

#### **Functional Requirements:**

- Android application must have sign-up and log-in information for users to use the application.
- The application required an edit option in the user's profile to edit the user's information.
- Application has a recent search list to find out the last search profile easily.
- The application must have an option for contact info to the admin and also get notification for new update information.

#### **Non-functional Requirements:**

- The user interface must be user-friendly.
- The application must be data secured.
- The application doesn't take more time to load application or features.

#### **Hardware and software requirements:**

To use the application on user's mobile phones some requirements is needed which is shown in 3.1 Table.

Table 3.1: Hardware Requirements

| Description         | Minimum Requirement |
|---------------------|---------------------|
| Processor           | x86 or x64          |
| RAM                 | 4GB or more         |
| Storage             | 2GB or more         |
| Internet Connection | Yes                 |

For using the application some requirements are needed for software which is shown in Table 3.2.

Table 3.2: Software Requirements

| Description           | Minimum Requirements |
|-----------------------|----------------------|
| Front-End:            | Visual Studio Code   |
| Operating System:     | Android 7.0 or more  |
| Programming Language: | Dart                 |
| Interface Design      | Flutter, Figma       |
| Database              | Firebase, SQL        |

### 3.3 Use Case Modeling and Description

Use case models to categorize the interactions between the actors in a system and to describe or explain the system's functions, viewpoint, and extension. Use-case diagrams are actually necessary for the flawless development of any project. Figure 3.2 represents the model that can be used to identify the futures of both internal and external forces affecting them. My project's use case model (Figure 3.2) shows us that there are two different kinds of users, or actors, in my application. The first actor in the model below is an employer or director, while the second is a job finder or seeker. The secondary user in this application with internal database management capabilities is called Admin. To access the application, when a user wants to sign up first they need to register by clicking the “sign-up” button to enter the registration page. On the registration page by filling out the form of registration by giving information such as full name, mail address, password, and other details. Then the user can register themselves successfully. After complete the registration process successfully the main page of the application will be displayed to the user where they can search for the users profile and also search for new posted job circular. If any field of registration is not filled then an alert will show at the top of the application that it can't be empty. And if anyone tries to create an account without mail address then also an alert will be generated in the top that must use a valid mail address. In figure 3.2, I tried to point out the function for users I have implemented

in my project. A job seeker can be entered into the system by signing into the system. Firstly they have to create an account in this application. After log-in to the system they will be capable to check their profile and update their information which is provided in their registration form by clicking the edit button and also edit some more features like educational qualification, profile picture upload. And employer or director can edit job post, create new job post, and also view apply job candidate. Employer also edit their requirements for get a job.

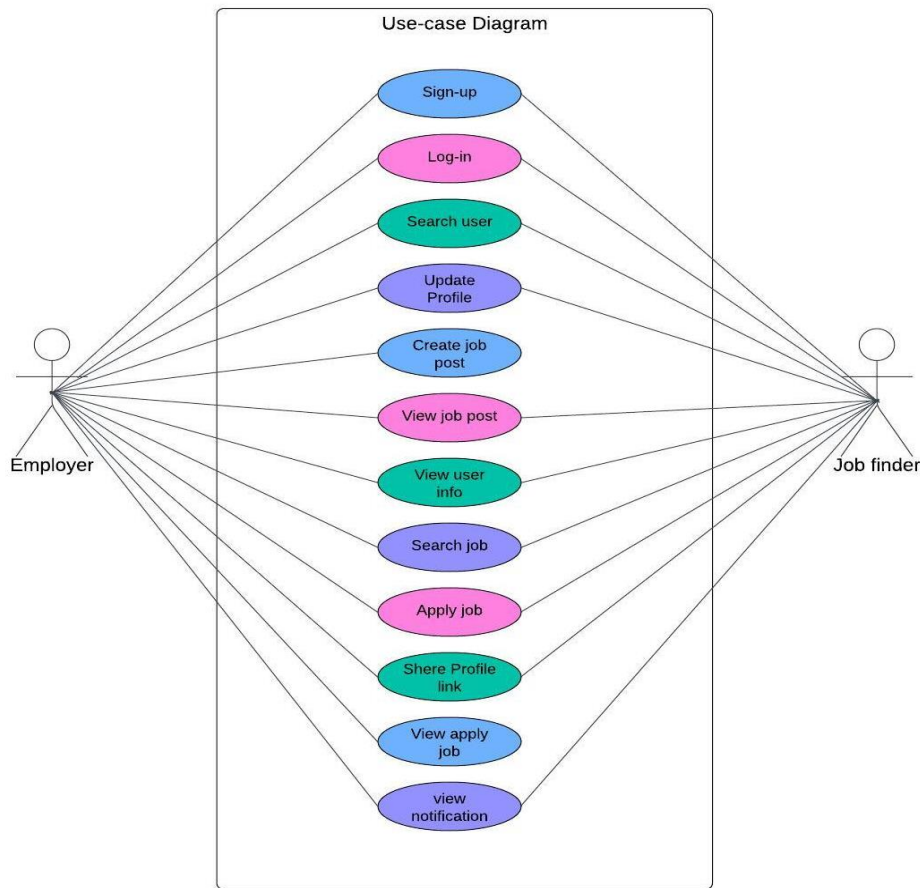


Figure 3.2 Use Case Diagram

**For User Module:**

Sign-up/Registration

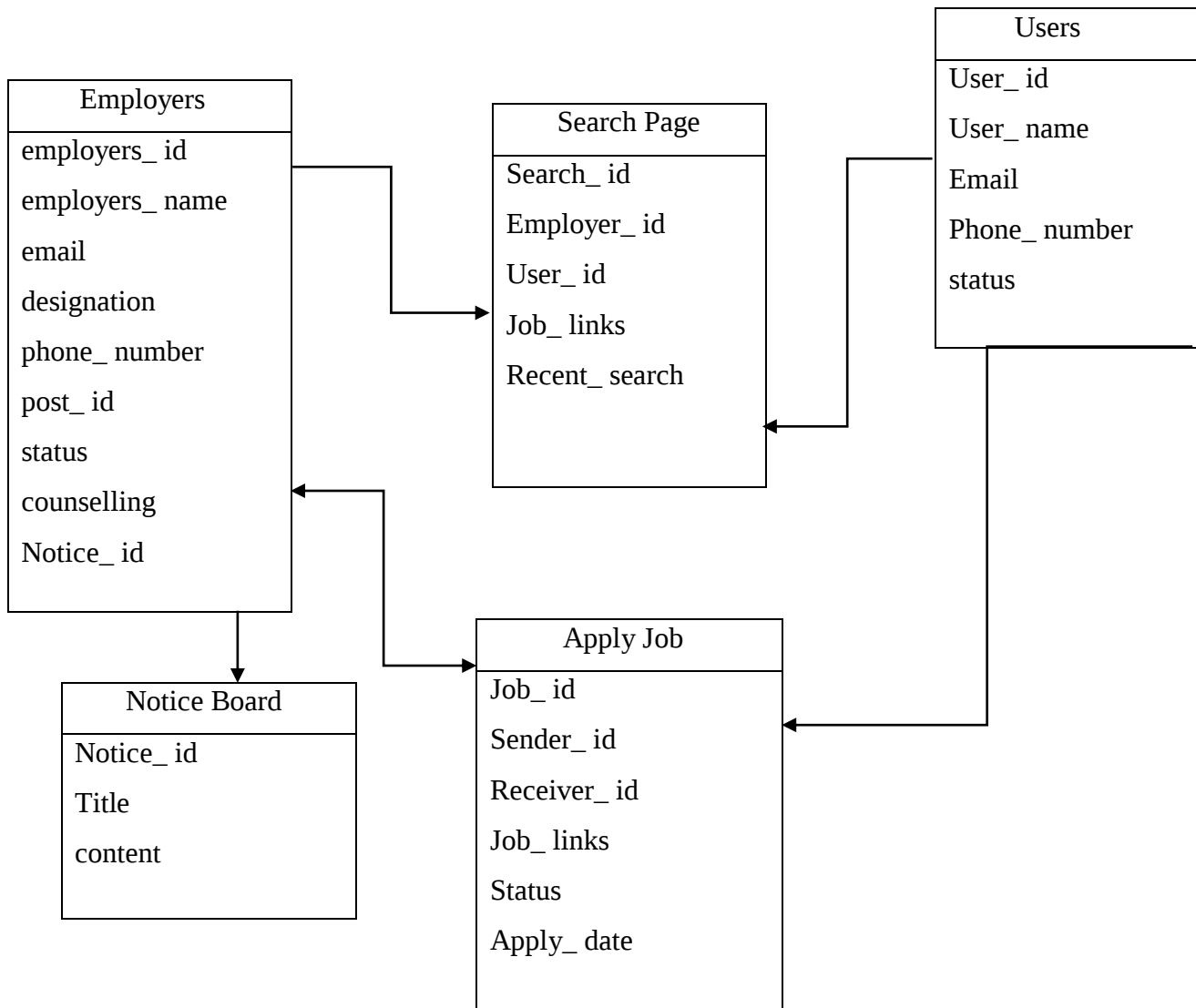
Log-in

**Properties:**

- Email
- Password
- Full Name
- Educational Background

### 3.4 Logical Data Model

The logical data model defines how a project or system should be implemented. It is a one kind of relational table that establishes the structure of the data model. This table contains different entities. In figure 3.3, I have mentioned some relational tables like Employer, Job seekers, search, apply, Job category. This logical data model has some attributes which are the employer id, user id, Job id, name, contact number, password, email address, apply Job etc. The logical model of my project is shown in figure 3.3.



### 3.5 Design Requirement

Design requirement is the functional attributes of a system that help to convert thinking and ideas into design features. I will demonstrate the design requirement for this application in this part. The requirement list is given below:

- The system has two users, employers, and job seekers.
- To create account user have a sign-up option.
- After sign-in users can edit or update their profile.
- After log-in, the employer and job seeker both can search for others profile.
- The employer and job seekers also can search for new posted job in this application.
- Job seekers can find their suitable job in job posted page.
- Employer and job seeker both users can upload profile picture in their profile.
- Employer will be able to contact applier for job over phone or mail.
- Employer also able to edit job post, and repost their posted job circular.
- An admin can edit or delete info or change any details from the database.

A project has to be elementary, and user-friendly for all types of users so a design requirement is a necessary step to make a project perfect. So, I have to make sure that my project should run efficiently and smoothly.

## CHAPTER 4

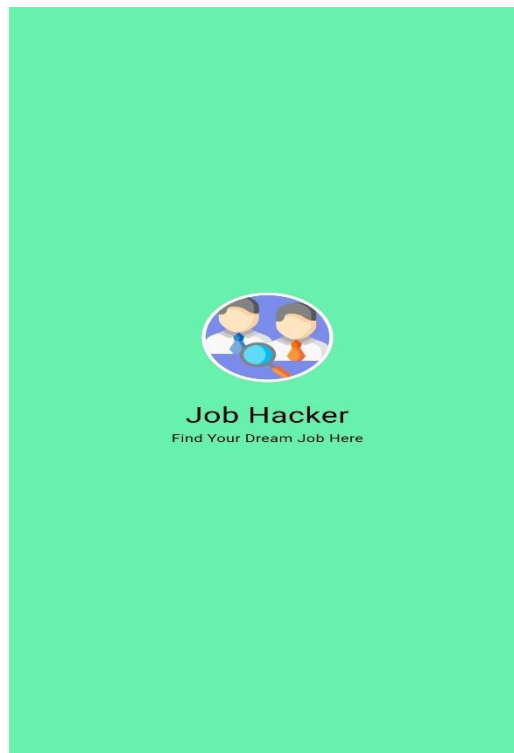
### DESIGN SPECIFICATION

#### 4.1 Front-End Design

Every program has a front-end interface through which users interact; thus, creating a front-end design that is both remarkable and rewarding while also being easily understood and user-friendly is crucial. For this reason, I've made an effort to make it appealing and user-friendly so that people can grasp it with ease. For my project, I implemented the front-end design using Visual Studio and Figma. I have utilized Flutter as a framework and Dart as a programming language to create user interfaces. We had to create each and every page of this program because it includes a lot of functionality on numerous pages. The program was intended to be more aesthetically pleasing and user-friendly so that users may find it appealing to use and easy to navigate.

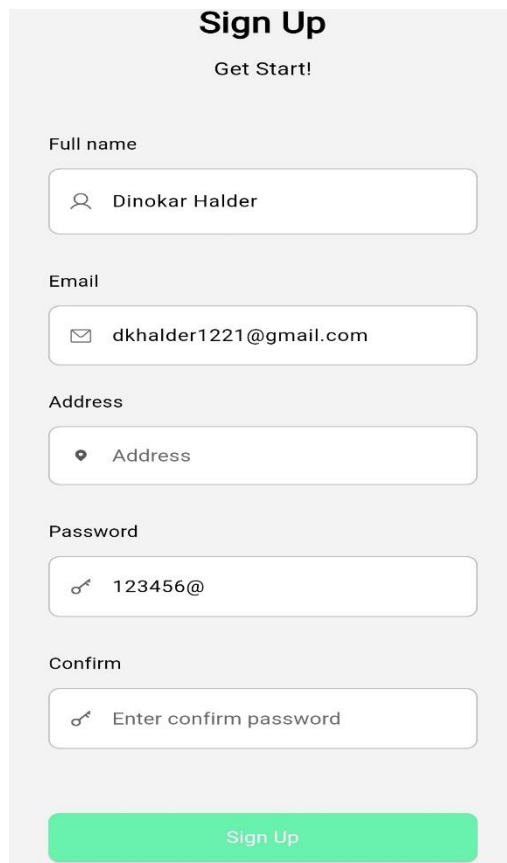
**4.1.1 App Onboarding:** After opening the application a splash screen of 5 seconds which is Figure 4.1 will be visible to the user.

Figure 4.1: App Splash Screen



### 4.1.2 Sign-Up Page

Every user who wants to use the application it is necessary to have an account to access it. To sign up users have to provide some details like Full name, a valid mail address, contact number, select user type. If user will be employer then mentioned their designation which is shown in the figure 4.2.



**Sign Up**  
Get Start!

Full name

Email

Address

Password

Confirm

Figure 4.2: Sign-up page

### 4.1.3 Log-In Page

If users have already registered in the application they can just use login option with their mail and password in the application. If users forgotten their password, they can just click the forget password button and a verification code will be generated in the user's mail address. From email, they can change their password and use it for further access. If someone does not have an account then they can simply click on the sign-up button and it will take them to the sign-up option to get registered which is shown in figure 4.3.

The figure displays two versions of a mobile application's login page. Both pages have a light gray background and a white card-like container for the form. The title 'Log In' is centered at the top in bold black text, followed by the subtitle 'Welcome back!' in a smaller font. The form contains two input fields: 'Email' with the value 'dkhalder1221@gmail.com' and 'Password' with the value '123456@'. Each field has a small icon (envelope for email, key for password) to its left. Below the password field is a link that says 'Forget Password?'. At the bottom of the form is a large green button with the text 'Log In'. Below the button is a link that says 'Don't have an account? Sign up'. The right screenshot is identical to the left one but includes a virtual keyboard overlay at the bottom, showing a numeric keypad, a QWERTY keyboard, and a language selector set to 'English'.

Figure 4.3: Log-in page

#### 4.1.4 Home Page

After logging into the application successfully an alert will be generated showing the message “Successfully Sign in” and the user arrive at the homepage. On the search page or home page, users are able to search for other profile and their suitable job post through the search box. There is also an advertisement board running on the home page which is handle by the admin. User also can get some direct link to posted job and employer profile. User are also able to see their recent searches on the home page which is shown in figure 4.4.

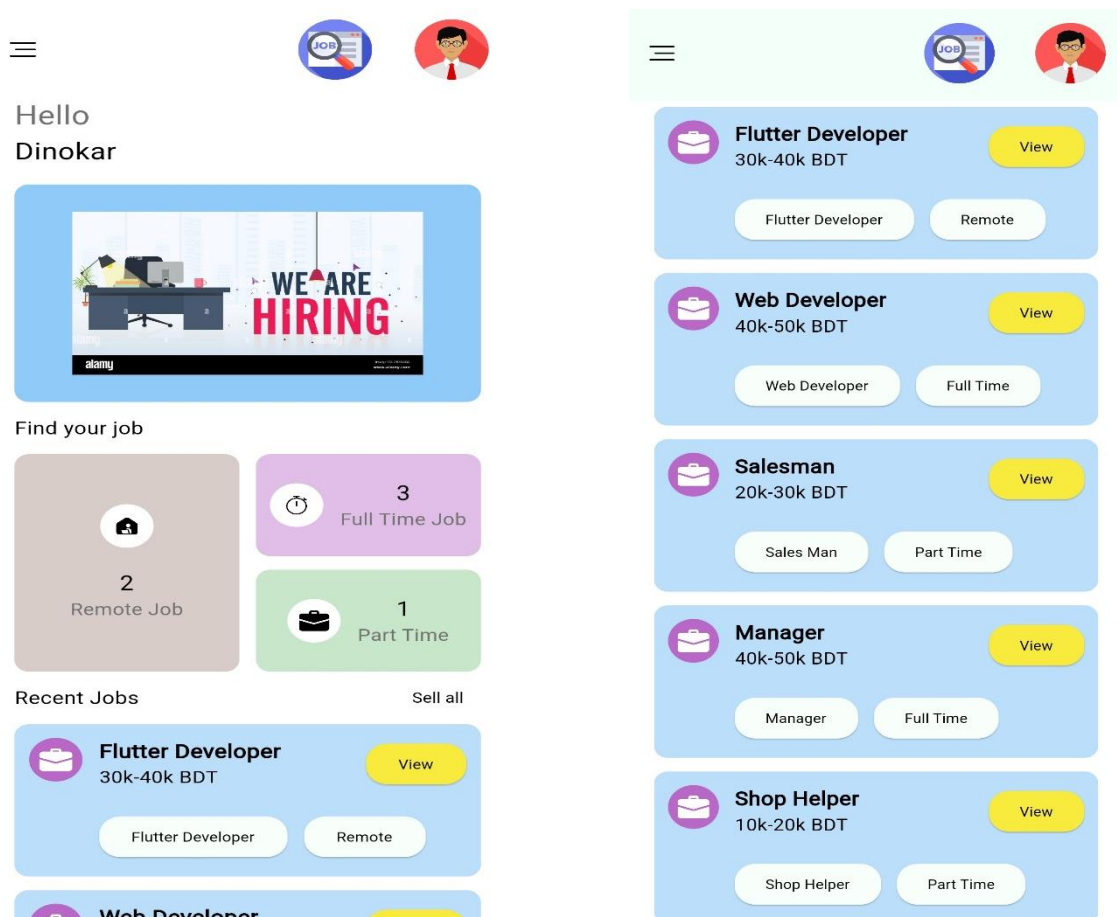
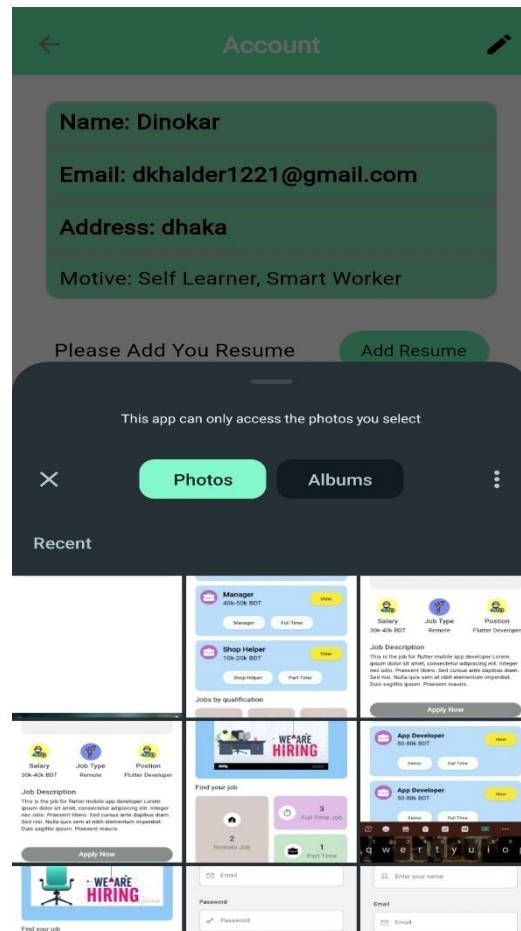
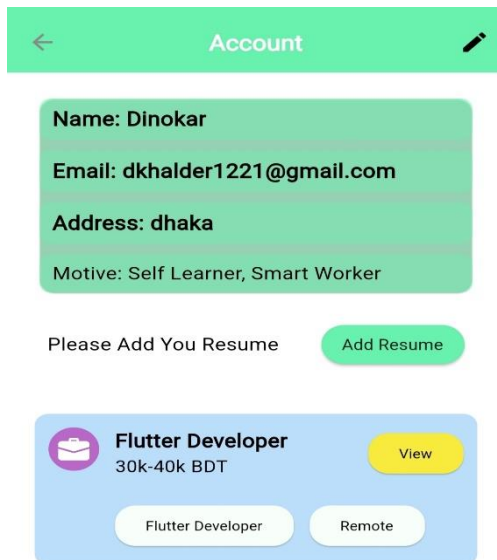


Figure 4.4: Home Page

### 4.1.5 Employer Profile

If users search for the correct user with their id, name or mail they will be able to see the profile of that user. The employer profile consists of some features like mail, employer id, their designation, and counseling time. An employer profile page is shown in figure 4.5.



### 4.1.6 Edit Profile

User can edit their profile by clicking the edit button which is in their profile. Users are able to edit all the information like their Name, Designation, Profile picture, Educational certificate, work experience etc. User are also able to change their profile picture from this edit option which is shown in figure 4.6. After changing the information using the update button, they can save their changes.

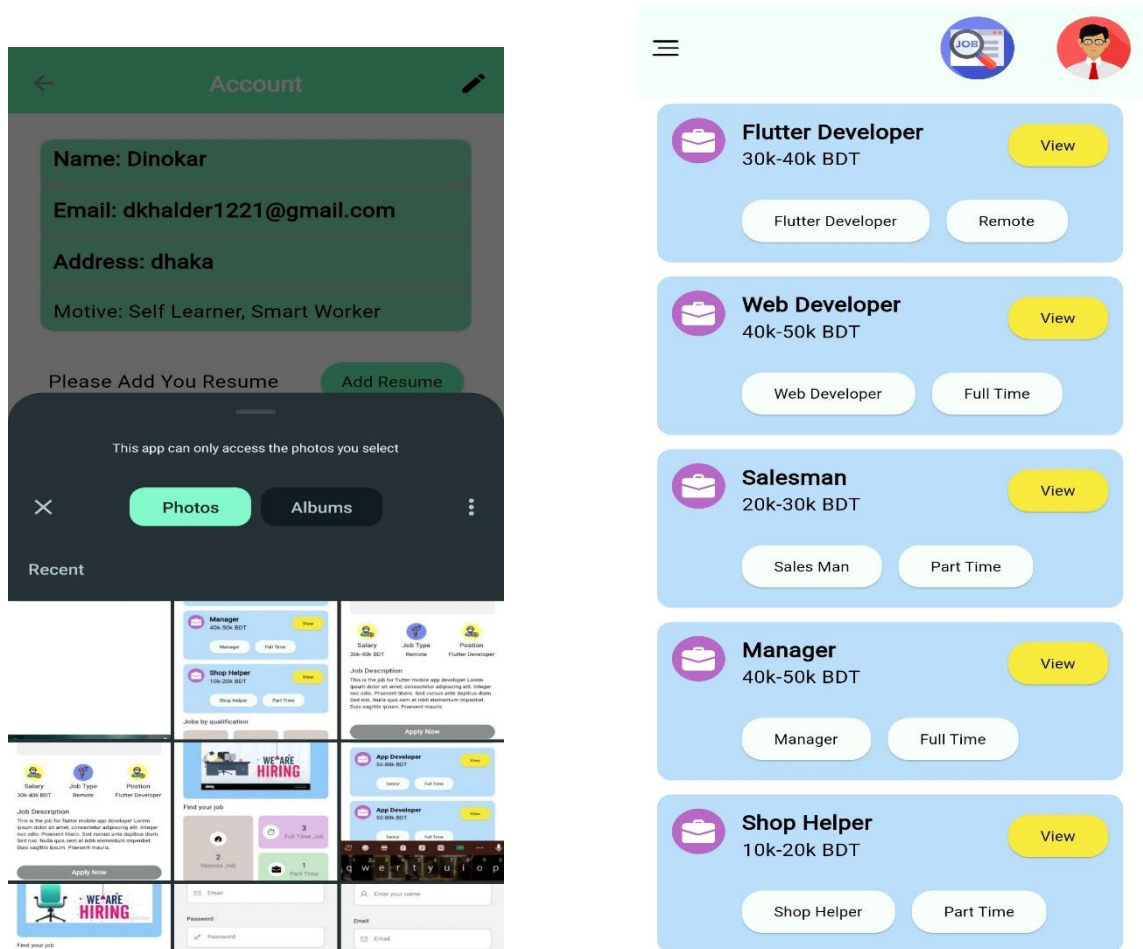


Figure 4.6: Edit Profile

### 4.1.7 Post Job and Edit

User can edit their announcement in their profile which is only for employer. They can edit the posted job circular and also select their employee from appliers. Employer can post new job and edit also. The job post and edit option which is shown in Figure 4.7.

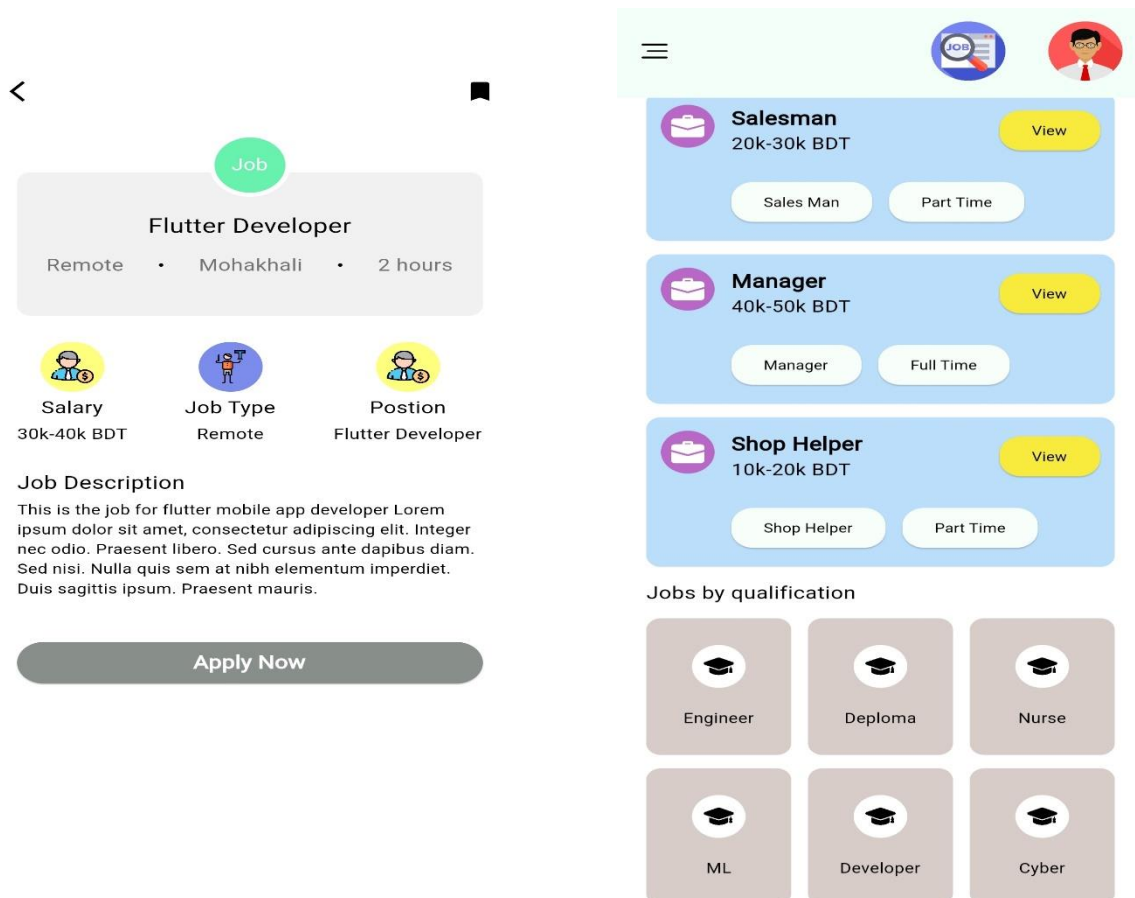


Figure 4.7: Post Job and Edit

#### 4.1.8 User's Profile

Job seekers create their profile and edit all information that they provide when completed registration. They can also uploading their profile picture, mail, User id, and their qualified certificate which are mentioned in Figure 4.8.

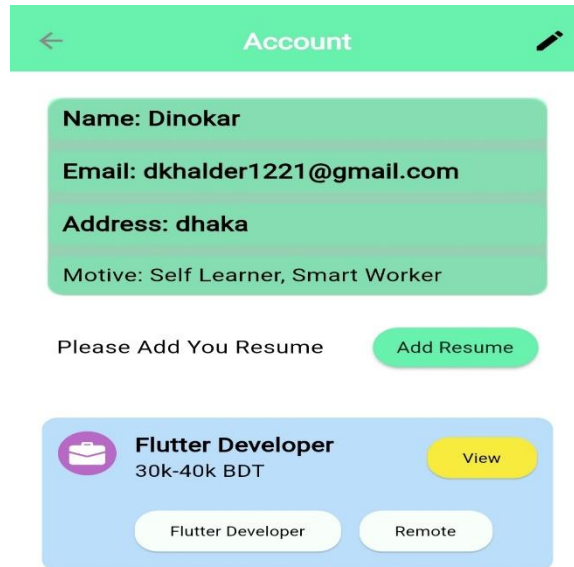


Figure 4.8: User's Profile

### 4.1.9 Search Job and Apply

Employer and job seekers both users can search job, view job details, and apply job. Job seekers can submit their educational qualification and work experience when they apply a new job. This option shown in figure 4.9.

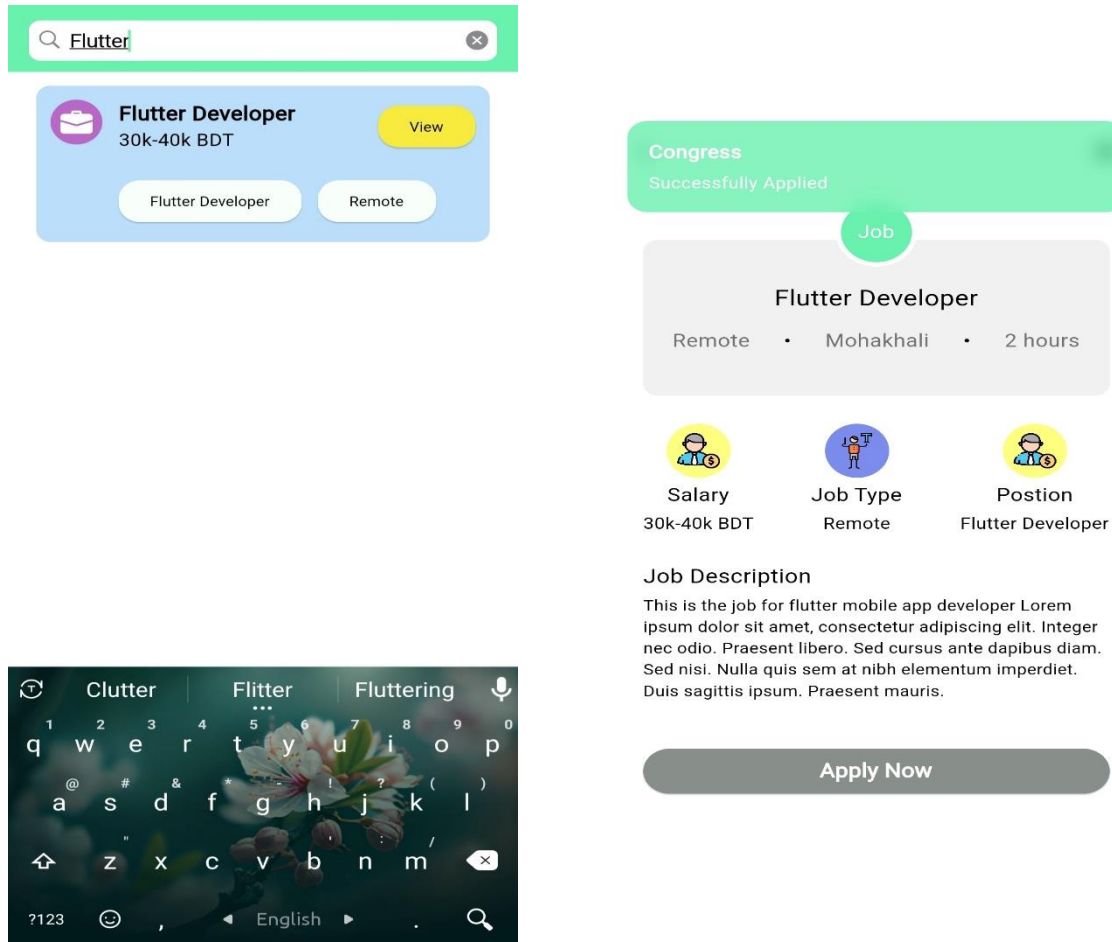


Figure 4.9: Search Job and Apply

## 4.2 Back-End Design

The back-end portion of any project or program handles all logical operations. I used a database to link resources with back-end applications, as well as Dart as the back-end language throughout my entire project. The back-end portion of the project is connected to all database-related codes that are utilized for resource gathering and information storage. For the back-end coding of my project, I utilized the programming language Dart and the framework Flutter. I utilized Firebase and a NoSQL database for this project's back-end maintenance. The home page for my project, "Your Jobs" is displayed in Figure 4.10 below.

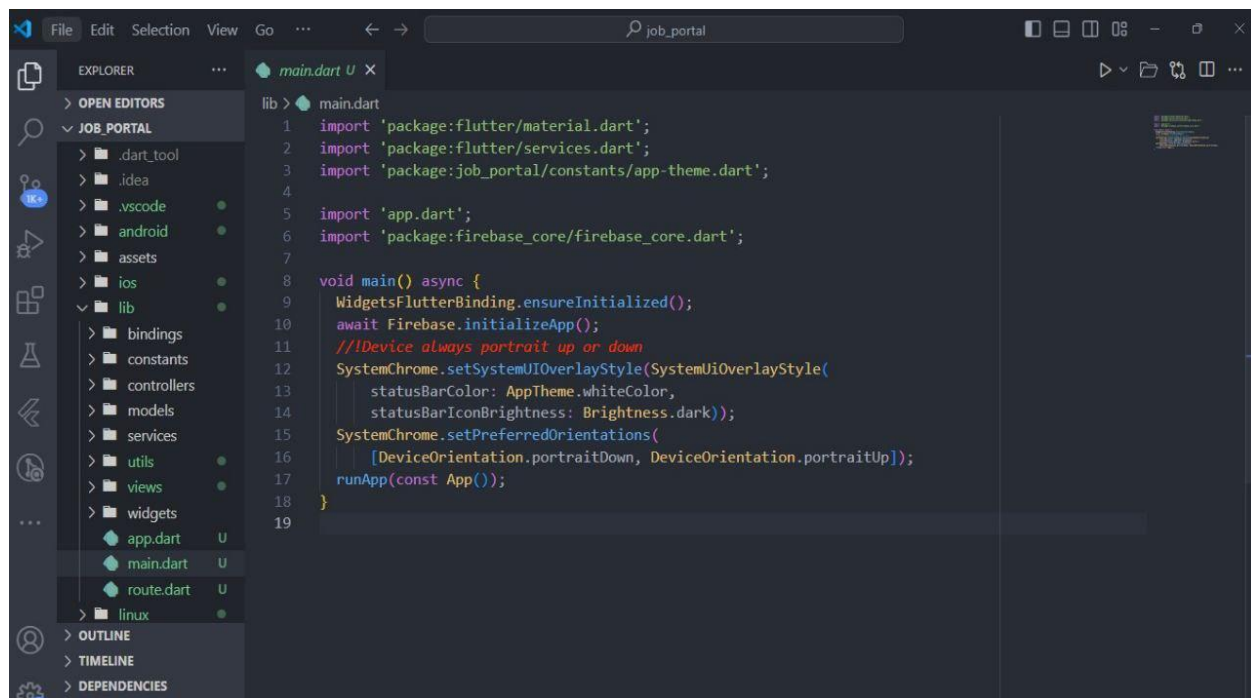


Figure 4.10: Back-End code

## 4.3 Interaction Design and UX

For any project or application, visual appearance is crucial. The process of creating a visual blueprint for any project in order to make it more flawless and user-friendly is known as interaction design. User modules are part of my application. Because of its speedy UI, people can sign up and log in with ease. When using the application's sign-up feature, the user must enter all required

information and save it. Users can utilize the log-in option to access the application after completing the sign-up procedure. To log out, click this symbol in the user profile. By selecting logout icon, users can exit the program. We can enhance the program and provide better outcomes and usability for users by using interaction design.

### **User Page Design:**

- Account creation (Registration from the sign-up page and creating an account)
- Log-in (By a valid mail and password user can be logging into the application)
- Users profile (Employer can see users profile, contact number, email, profile picture, necessary links, and any type of information)
- Employer profile (Employer id, contact number, email, designation, and any type of information)
- Bottom navigation bar (Home, Mail, Profile)
- Log-out (log out from the application)

In project management, the process of improving the user experience that necessitates user engagement is managed by the user experience, or UX. I conducted online and in-person polls and research, and the people responded favorably. I gave the application to a few individuals after finishing my project, and they gave it a great evaluation. Additionally, using the program is more comfortable and quicker.

## **4.4 implementation Requirements**

To finish this job flawlessly, several different kinds of actions have been performed. I had a ton of alternatives when it came to the database, programming language, and framework to use when developing my project. I'll go with flutter and dart. I found that using Visual Studio to develop and change the code for my project was more convenient. A particular real-time database was also employed by me. I utilized the Flutter Framework library, which is one of the many libraries available in Dart. As a result, Flutter is simpler to use and requires less coding complexity. I store apps, data, and communications using Firebase and SQL. Any user who wants to speak with others has a strong interest in real-time communication. That's why I have used Firebase to create real-time messaging features.

## CHAPTER 5

### IMPLEMENTATION AND TESTING

#### 5.1 Implementation of Database

All project-related data, records, and current resources are accessible through the database. Any system development process requires a protected database. My project has been developed using Firebase as a database. The major goal of my project was to create various functionalities for this back-end software application that uses a real-time database. The administrator may access all of the data through the database and can also make any necessary edits, uploads, or deletions. I followed a few procedures in the first step to link the firebase with my project. In order to hold user data, I made a "user" table that contains every piece of information that a user profile in my project may possibly include, including name, email, ID, room number, user type, password, department, notice, and profile image. To save the modified procedure from the user profile, I made a "routine" table. To keep track of all the messages and their dates, I also made a "chat room." To view the most current conversations, I also made another "chat list." The application's functionality and new tables can be added to the database by the secondary user, admin. The administrator can also change and remove data from the database. Figure 5.1 below displays the table I made in Firebase.

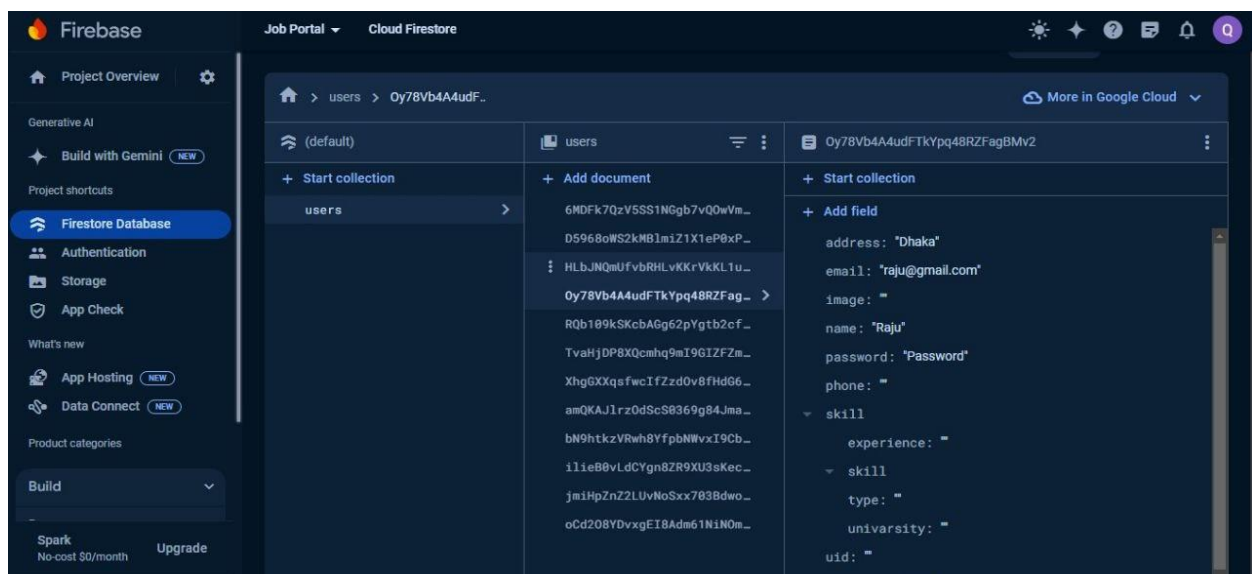


Figure 5.1: Firebase Database

There is space for storing images in my NoSQL database. In this database, users may send image messages and set profile photographs. The Firebase database was implemented in a simple and efficient manner. I take care to confirm that every necessary piece of data utilized for the project is kept in an organized manner, as seen in Figure 5.4. During the installation and testing phase, the database was tested, and the outcome was as anticipated and positive. The program may accomplish a vast array of features and functionalities by utilizing this database profile.

## **5.2 Implementation of Front-End Design**

In order to create a project or application with a seamless, comprehensible, and intuitive user interface, user interface design, or UI for short, is essential. I made an effort to ensure that I would create an enticing user interface for them. I utilized Flutter as my programming language to construct the front-end design of the application "Your Jobs" initially developing the user interface with Figma. Programmers must concurrently create apps for many operating systems. This causes them constant inconvenience. However, Flutter fixes this issue. Flutter is an open-source, free, cross-platform program. It includes widgets and tools to help create a quick and attractive application. You can use the Flutter program on Windows, Linux, Mac, iOS, and Android platforms. The application's graphical user interface, text front, and colors are all well-organized information, and the front-end, or UI design, is generally polished and conventional. The front-end design of the application "Your Jobs" was successfully implemented in order to implement the many features and functionality of this application. Utilizing Flutter, Dart, and Figma as frontend languages and UI design tools enables me to develop an intuitive, comprehensible, and effective platform that will benefit employers and users alike.

## **5.3 Testing Implementation**

After the project was completed successfully, I evaluated "Your Jobs" using a few different methods to evaluate the app's scalability, security, dependability, and performance. The primary goal of the project's and the application's testing was to make sure that the application worked as intended, was simple to use, and was straightforward to comprehend. A variety of tests were done in order to guarantee usability, reusability, performance, reliability, scalability, and portability. I conducted every manual test that was conducted. Additionally, load and stress tests, as well as other automated testing, were carried out. In order to do the manual testing, I started by evaluating

the sign-up and login functionality. I attempted to sign up and log in using a variety of valid and invalid email addresses and passwords, as well as trying to log in without a valid mail address. In the following stage, I evaluate the database's ability to accurately gather and store all user data. Next, I run another test to see if, based on user data, the recent search profile list displays correctly on the main page. I also checked to see if the search function displayed the right profile. I verified whether or not the database accurately contains all of the information related to the profile modification. I also checked to see whether the messaging option was sending and receiving messages appropriately. This aids in my assessment and determination of the application's dependability, scalability, and performance in many real-world scenarios.

## **5.4 Test Result and Report**

A large number of test cases were employed in order to guarantee scalability, improve speed, eliminate bugs, and make the project user-friendly. To get around the difficulties, this test case includes both positive and negative tests. I conducted a lot of testing using various scenarios and conditions, and I chose a few test cases and their reports to include in Table 5.1.

### **Test Result and Report Table**

Table 5.1: 'Your Jobs' Features test report table

| Test Case | Test Type    | Test Description           | Input Data                                    | Expected Result                 | Actual Result                           | Status |
|-----------|--------------|----------------------------|-----------------------------------------------|---------------------------------|-----------------------------------------|--------|
| 1         | Unit Testing | User Registration          | Fill up from correctly with valid credentials | Successful Registration of user | Successful Registration of user         | Pass   |
|           |              | User Registration          | Use valid mail, email field can't be empty.   | Alert Use email.                | Form is incomplete, Fill all the field. | Pass   |
| 1         | Unit Testing | Verify login functionality | Valid login credentials                       | Successful login                | Successful login                        | Pass   |
| 2         | Beta Testing | Verify Searching profile   | Search user profile                           | User profile displayed          | User profile displayed                  | Pass   |
| 3         | Send Email   | Send Email to user         | Enter your text here                          | Click the send button for send  | Successfully send your email            | Pass   |
| 4         | Post job     | Edit job circular          | Fill up field                                 | Job Save successfully           | Job Save successfully                   | Pass   |

|    |                       |                                         |                                          |                                   |                                   |      |
|----|-----------------------|-----------------------------------------|------------------------------------------|-----------------------------------|-----------------------------------|------|
| 5  | Functionality Testing | Verify Privacy policy                   | View privacy policy                      | Policy display correctly          | Policy display correctly          | Pass |
|    |                       | Verify Data security                    | Attempt to access un-authorized data     | Access denied                     | Access denied                     | Pass |
| 6  | Usability Testing     | Verify load handling                    | Simulate high traffic volume             | Perform without any extra loading | Perform without any extra loading | Pass |
| 7  | Compatibility Testing | Verify Compatibility                    | Tested in various device<br>Android, iOS | Perform smoothly in all device    | Perform smoothly in all device    | Pass |
| 8  | Security Testing      | Data encryption verify                  | Attempt to access data                   | Access denied                     | Access denied                     | Pass |
| 9  | Database Testing      | Check database connectivity and working | Connect to the database                  | Connection successful             | Connection successful             | Pass |
| 10 | Log out               | User log out                            | Click the home page to log out           | Successfully log out              | Successfully logout               | Pass |

## **CHAPTER 6**

### **IMPACT ON SOCIETY, ENVIRONMENT, AND SUSTAINABILITY**

#### **6.1 Impact on Society**

The creation of an Android app for employment circular searches might have a big social impact. This application seeks to improve work possibilities, economic growth, social mobility, and general quality of life by expediting the job search process. Job hunters will find it quicker and more effective to locate appropriate job advertisements with the help of the application. Users may find opportunities that fit their abilities and preferences by using complex search criteria and combining job circulars from several sources. Better job matching and increased employment rates will result from this. In addition to getting real-time notifications, users will have access to tools for managing their job applications and getting career guidance. Their confidence will soar, and their chances of landing a good job will rise as a result of this empowerment. This is especially crucial for people who live in rural or underdeveloped regions and might not have easy access to conventional job search options. The program encourages users to enhance their employability by offering resources, including career guidance and resume-building tools. A workforce that is more competent and adaptive will result from this emphasis on education and skill development. One important factor that affects life quality is employment. The program will support better mental health, financial stability, and general well-being by assisting users in finding suitable jobs. Having a stable job enables people to support their families and make meaningful contributions to their communities.

#### **6.2 Impact on Environment**

It is important to take the surroundings into account while developing an Android application for job circular searches. This section examines the direct and indirect ways in which the application might support environmental sustainability. Printed resumes, applications, and job postings take up a lot of paper when using traditional job search techniques. The program will drastically cut

down on paper usage by digitizing the job search process, protecting the environment, and cutting waste. In an effort to promote a move toward remote employment, the program will provide job postings for remote positions. A reduced environmental footprint results from remote work since it lessens the pollution caused by daily journeys, lowers energy use in office buildings, and minimizes the need for office space. Content that encourages eco-friendly behaviors and informs users about the effects of their job-seeking activities on the environment may be included in the application. For example, it can provide advice on how to cut down on carbon footprints and save money when looking for work and going on interviews. The program seeks to encourage environmental sustainability; however, there may be issues because of how much energy servers and mobile devices use. The program will be made as energy-efficient as possible, and server operations will take into account renewable energy sources in order to lessen these effects.

## **CHAPTER 7**

### **CONCLUSION AND FUTURE SCOPE**

#### **7.1 Discussion and Conclusion**

The project “Your Jobs” is a job search platform that provide us a convenient and suitable job opportunities for growing our bright future. The having a major positive influence on society is the suggested Android application for job circular searches. The application is expected to contribute to a more successful and inclusive society through the promotion of social mobility, economic growth, and enhanced job possibilities. By taking early measures to address any issues, we can make sure that every user gets the most out of the program. There are a few possible improvements that might be made in the future. These include introducing features like skill evaluations and interview preparation tools, growing the database to include new job sources, and incorporating AI-based job suggestions. Furthermore, investigating joint ventures with academic institutions and businesses might augment the application's worth.

In conclusion, by offering a thorough, effective, and environmentally friendly solution, this Android job search software has the potential to completely transform the job search process. The application has the potential to have a long-lasting beneficial effect on the labor market and contribute to a more connected, sustainable future by meeting the demands of both companies and job seekers.

## **7.2 Scope for Future Development**

- AI-Based Job Recommendations
- Advanced Filtering Options
- Enhanced Notifications
- Integration with Block chain for Verification
- Virtual Reality (VR) for Interviews
- Multilingual Support
- User Interface (UI) Enhancements
- User Feedback Integration
- Partnerships with Educational Institutions
- Integration with Social Media Platforms

**End**

## REFERENCES

- [1]LinkedIn application <https://www.educationalappstore.com/app/LinkedIn>, last accessed on 02 February, 2024
- [2]Skill\_Jobs, [https://home.skill\\_jobs.com/](https://home.skill_jobs.com/), last accessed on 03 March, 2024
- [3]BD Jobs, <https://www.bd.jobs.com/en>, last accessed on 05 April 2024
- [4]Chakri.com, <https://www.chakri.com/en>, last accessed on 05 June 2024

## PLAGIARISM

### YOUR JOBS: AN ANDROID APPLICATION FOR FIND JOBS AND INTERNSHIP PROGRAM

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