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Department of Computer Science and Engineering
Dhulikhel, Kavre



A Project Report

on

“Job Hunt”

[Code No: ENGG 102]

(For partial fulfillment of 1st Year/2nd Semester in Computer Engineering)

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Submission Date:

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Bona fide Certificate

This project work on

“JOB HUNT”

is the bona fide work of

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who carried out the project work under my supervision.

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Date: 2022/05/04

Acknowledgement

We would like to express our heartfelt gratitude to our supervisor Mr. Akash Adhikari for supervising, encouraging and constantly motivating us. Without his help, our project would not have been possible. We would not have explored our skills and developed enthusiasm for Database Management System and Qt Project without him. Akash sir had worked earlier on similar projects like MeroJob So, his input on our work was really insightful and effective. He guided us throughout the project being available whenever we needed him in regards to our doubts.His presence increased the efficiency of our workflow.

We would like to thank our project coordinator for approving our proposal and assigning different supervisors for our projects. We would like to express our gratitude to Kathmandu University for providing such an opportunity to enhance the idea of collaborative writing and group work in the form of semester-long projects and providing us with an opportunity to present and explore ideas.

-Project JobHunt

Abstract

“Job Hunt” is a platform which connects employers with jobseekers. In the current world, employment is a basic necessity. So we came up with this idea of creating a desktop application named Job Hunt. The main objective of this desktop application is to provide a proper platform for employers to post jobs and job seekers to get their desired jobs as per their skill. It uses Qt framework along with SQLite for graphical user interface, coding and database management system. We learned “Object Oriented Programming” and “Database Management System” through this project. We also learned how to collaborate and work together on a project.

Keywords: OOP, QT, C++, SQLite, QSS, GUI, Python, Compiler,

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Acronyms/Abbreviations

The list of all abbreviations used in the documentation is included in this section.

See the example below:

C++

Virtual Reality

GUI

Graphical User Interface

OOP

Object Oriented Programming

SQL

Structured Query Language

Chapter 1 Introduction

1.1 Background

In the present context, most of the people try to do jobs in companies. Similarly people owning and running the companies also search for people to hire for their companies. Searching for a job and employees can be a hectic process. The project ‘Job Hunt’ incorporates the use of computer application to search and apply for the job. The project bridges between the two groups: Job Seekers and Employers. That is the place where our project “Job hunt” comes into play. It is a platform for both job seekers and employers to search for appropriate options for either choosing a job or providing jobs.

1.2 Objectives

The main objectives of this project are:

- To learn C++ using Object Oriented Programming and Libraries.
- To explore the database management system.
- To digitalize the job searching process and make it easier for both job seeker and employer.
- To help people get different types of jobs like freelancing, internships and so on.

1.3 Motivation and Significance

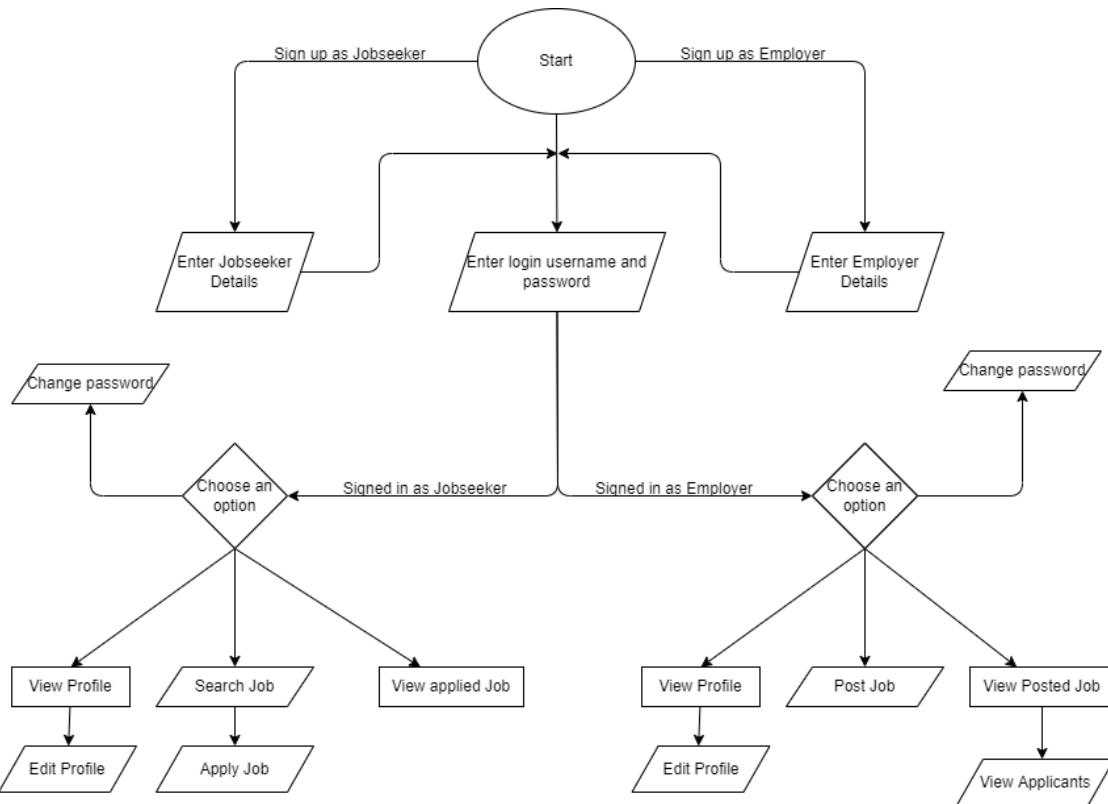
As the pandemic has affected our daily lives, the most affected were the people who had to lose their jobs due to the pandemic. Also those people who were trying to find jobs were not able to do anything due to the lockdown. Similarly many companies looking for employees were not able to search and hire them due to the lack of proper platforms connecting job seekers and employers. In this kind of case, online platforms would have been a boon. So we came up with this idea of

making a platform to connect jobseekers and employers digitally as per their needs.

Chapter 2 Related Works

There are many platforms like Indeed Job, Career Builder, LinkedIn Job Search, Merojob, Merorojgari etc. which serve us to find suitable jobs as per our skills and qualifications. These sites gave us an idea on what a job searching platform looks like. Many projects related to this idea are done in Python. In our project, Qt and SQLite are major frameworks. Database Management System is the core concept of our program. We got ideas from these sites and developed this project “Job Hunt” where job providers and job seekers can communicate. Many projects related to this idea are done in Python. In our project, Qt and SQLite are major frameworks. Qt is used for coding and GUI designing whereas SQLite is used for storing data and managing the database.

Chapter 3 Design and Implementation



3.1 System Requirement Specifications

3.1.1 Software Specifications

-QT Creator

-C++ Compiler (mingw)

-SQLite

-DB Browser for SQLite

3.1.2 Hardware Specifications

The project doesn't require much memory and storage. For the input we need a system with well functioning mouse and keyboard . We also need a display for viewing the program.

Chapter 4 Discussion on the achievements

4.1. Features

-We can sign up as job seeker and employer both and fill up the details for it.

-We can login as a job seeker or employer.

-If we login as a job seeker we are provided with options:

- 1) to search for a job and apply for the job as well
- 2) to view applied job
- 3) to view and edit profile of the job seeker
- 4) to change password

-If we login as a employer we are provided with options:

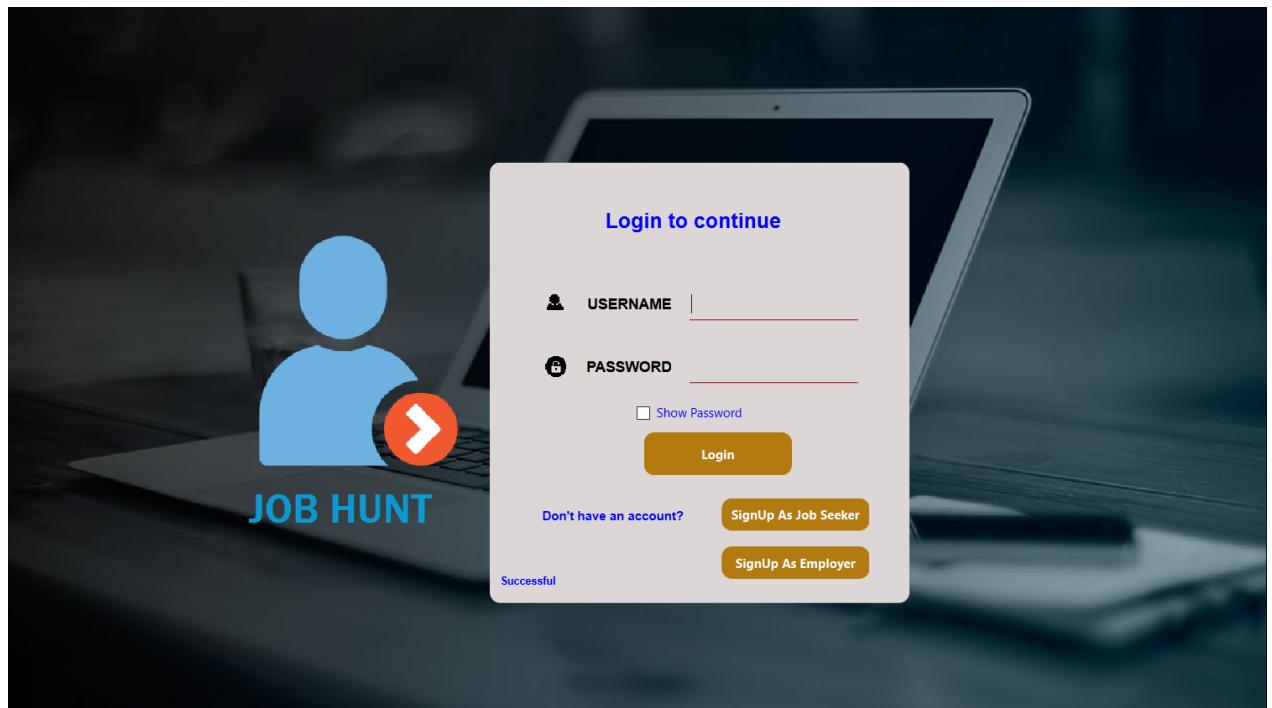
- 1) to provide job
- 2) to view provided job and applicants
- 3) view profile of the Employer
- 4) to change password

4.1.1 User interface

The UI is very simple and user friendly. It is similar to the UI of other platforms we regularly use. In this project we used Qt for developing our UI. We designed it by using QSS which is similar to CSS. The interface has three phases:

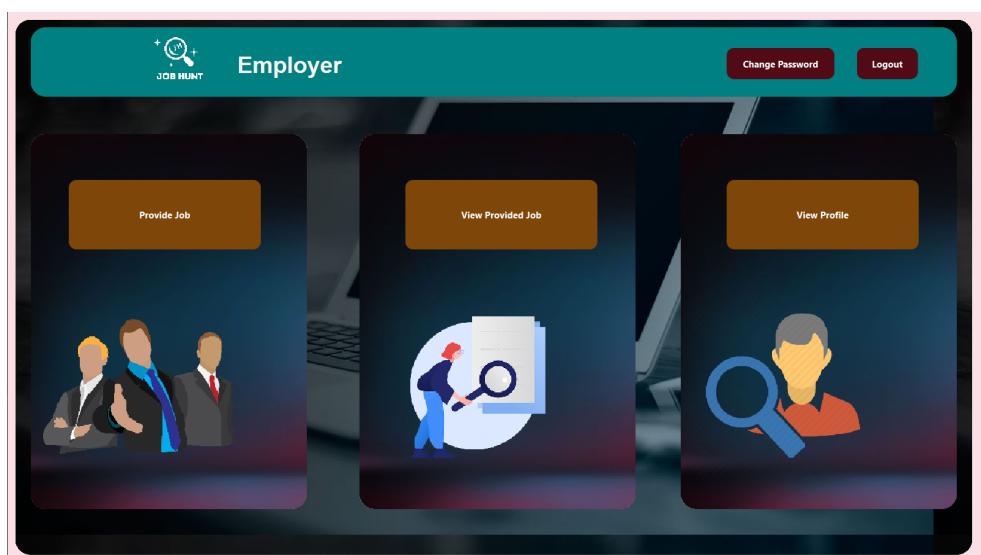
1.Login And Signup Phase :

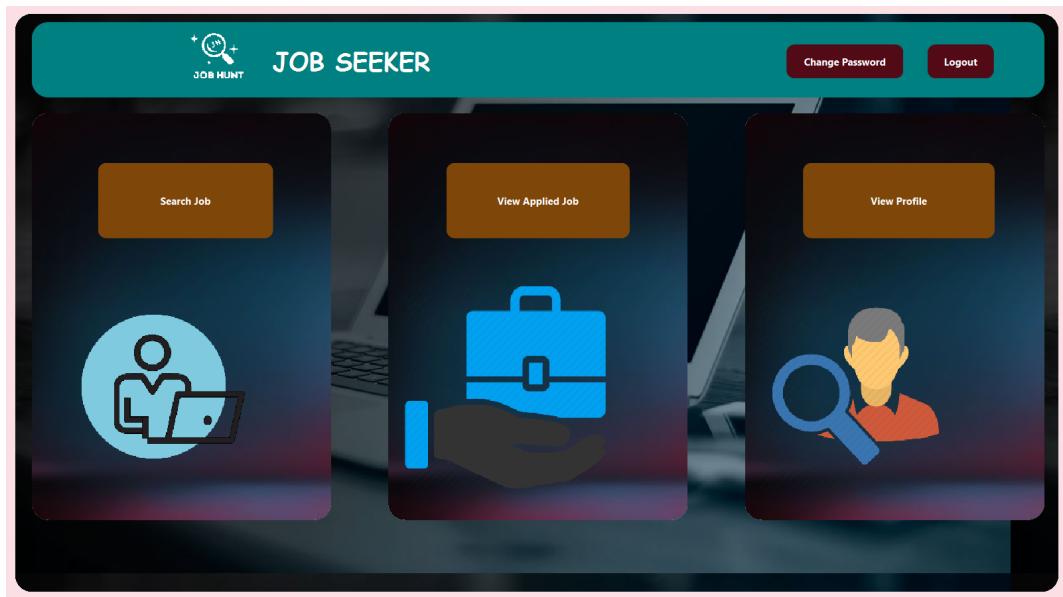
It includes a combined login page for both employer and jobseeker while the signup page is unique to both as shown below.



2.MainMenu Phase:

After the successful login a separate page for either employer or job seeker appears from where the user can choose various options as shown below.





3.Utility Phase :

This phase includes all the other pages where user uses services and tasks which are listed below broadly separated to two categories :

A.Job Seeker:

31. Search Job:

In this page users search and apply for jobs .

The 'Search Available Jobs' page has a teal header with the 'JOB HUNT' logo and a 'Back' button. Below the header is a search bar and a 'Search Job' button. A note says 'Click on the Job id to apply'. On the left, there's a sidebar titled 'Apply For the Job' with input fields for Job Name, Job Address, Qualification, Salary, Job Type, Job Id, Applicant Name, and Employer Name, followed by an 'Apply' button. The main area shows a table of job listings with columns: JobId, JobName, JobAddress, Qualification, Salary, and JobType. The table data is as follows:

	JobId	JobName	JobAddress	Qualification	Salary	JobType
1	1	Frontend ...	Dhulikhel	Bachlore	20000	Permanent
2	2	Quality ...	New ...	BTech in ...	40000	Permanent
3	3	Front end...	Nepalgunj	bachelors...	30000	internship
4	4	Full stack...	Silicon ...	None	100000	Web ...
5	5	QT	DHULIKHEL	UNDERGR...	20000	One Time

Below the table is a 'Job Description' input field.

3.2. View Applied Job:

In this page users can see the result for all jobs they have applied for.

The screenshot shows a mobile application interface titled "View Applied Job". At the top, there is a search icon and a "Back" button. Below the title, a message says "Select desired job id to see results". A table displays a single job record with the following data:

JobId	JobName	JobAddress	Qualification	Salary	JobType	Employer
1	Frontend ...	Dhulikhel	Bachlore	20000	Permanent	rishi

At the bottom left is a cartoon character icon, and to its right are labels for "Job ID", "JobName", "Employer", "Username", and "Status".

3.3. View Profile:

In this page jobseekers see and edit their profile.

The screenshot shows a mobile application interface titled "View Profile". At the top, there is a user icon and buttons for "Edit" and "Back". Below the title, a list of personal details is displayed:

First Name	rohit
Last Name	karki
Phone Number	9867427171
Address	butwal
Education	und
Email	rohitkarki@gmail.com
Current Company	lsms

B.Employer:

1.Provide Job:

In this page employers can post varieties of jobs .

The screenshot shows a web-based application for posting a job. At the top center is a small orange icon of a person jumping. To its right, the text "Provide Job" is displayed in blue. Below this, there is a large input area divided into two columns. The left column contains five input fields with labels: "Job Name", "Job Address", "Qualification", "Salary", and "Job Type". The right column contains a large, empty text area labeled "Description". At the bottom of the input area are two orange buttons: "Cancel" on the left and "Post Job" on the right.

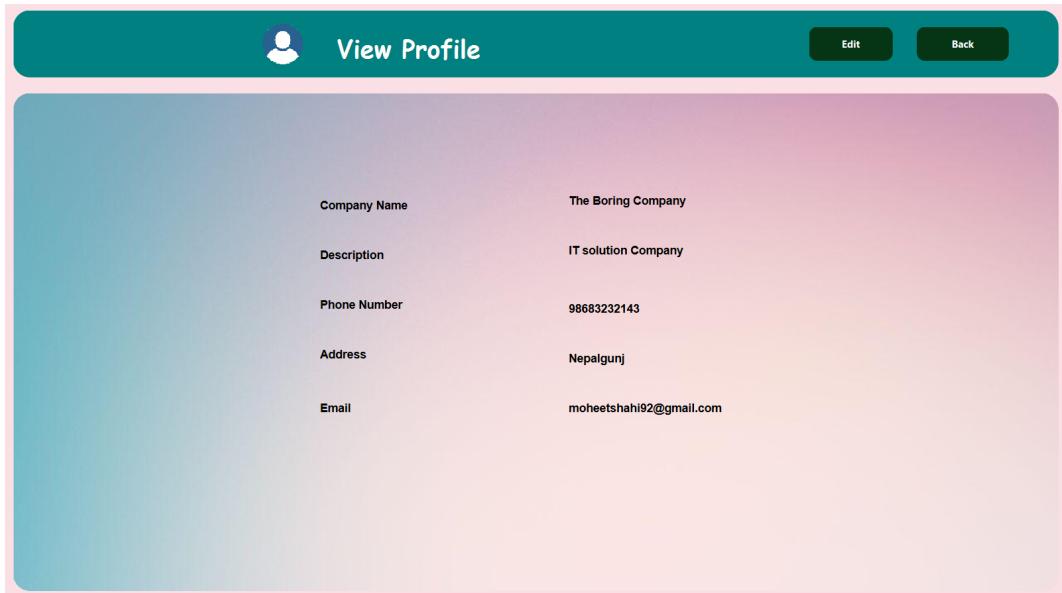
2.View Provided Job:

In this page employers can see the list of applicants for all jobs they have posted. They can either accept or reject the application.

The screenshot shows a list of jobs posted by the employer. At the top, there is a header bar with the "JOBS" logo on the left, the title "Provided Jobs" in the center, and a "Back" button on the right. Below the header, there is a search bar with a dropdown menu showing the value "3" and a "Load Applicants" button. To the right of the search bar is a "Choose applicant to" section with "Select" and "Reject" buttons. A modal window is open, showing a list of applicants. The first applicant listed is "nirajan", with a description below it: "front end developer who can use js react". On the left side of the main content area, there is a summary of the job details for the selected job ID, including "Job Name: Front end developer", "Job Address: Nepalgunj", "Qualification: bachelors in it or ce", "Salary: 30000", and "Job Type: internship".

3.View Profile:

In this page employers see and edit their profile.



#.Change Password:

In this page users can change passwords for their accounts.

Chapter 5 Conclusion

5.1 Limitations

This project is in its early phases so it's completely offline at the present moment. The search algorithm of the project is limited as the keyword for search must match entirely with data from the table. There is no feature for suggestion based on similar keywords. Also, this job portal system is currently searching jobs related to the IT field. While selecting a job to apply, the user must always click on Job Id. There is also no provision to match the qualification of jobseekers as demanded by employers.

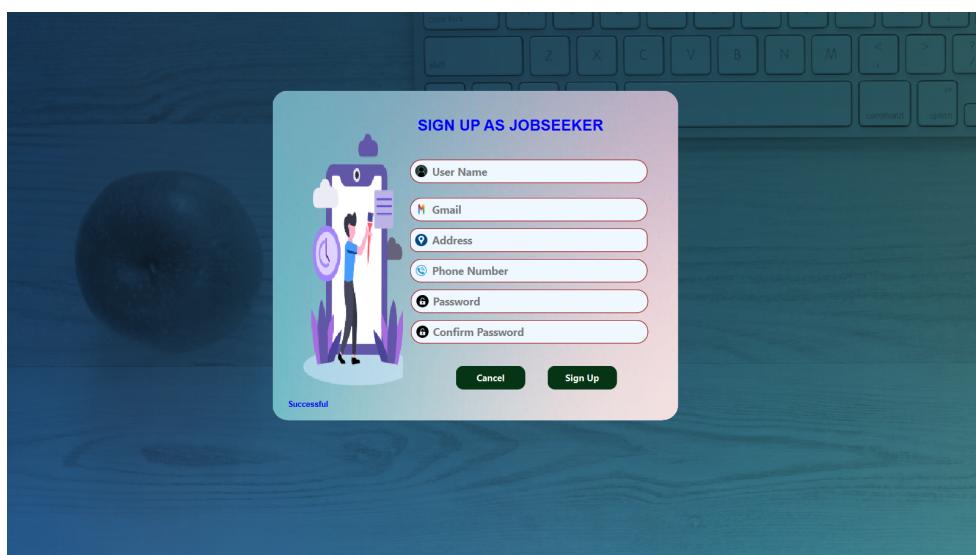
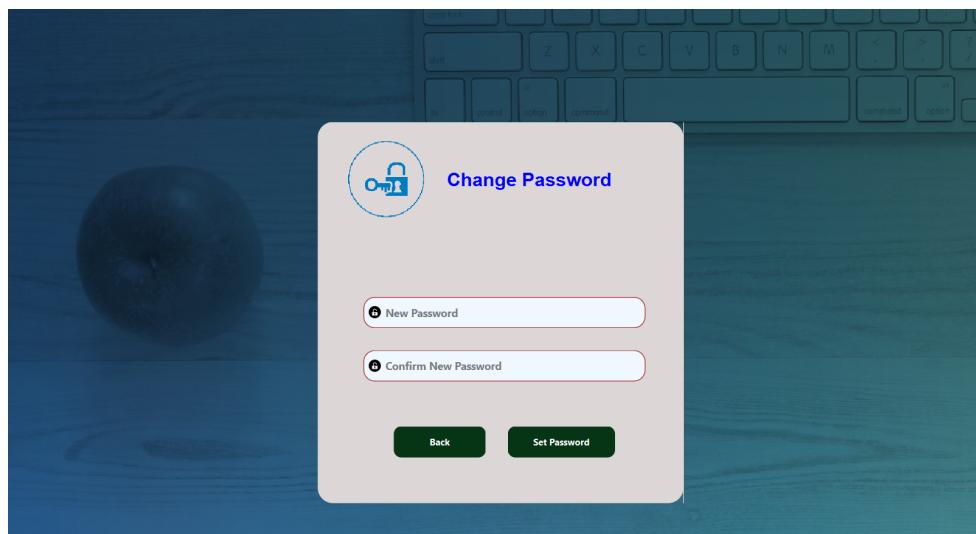
5.2 Future Enhancement

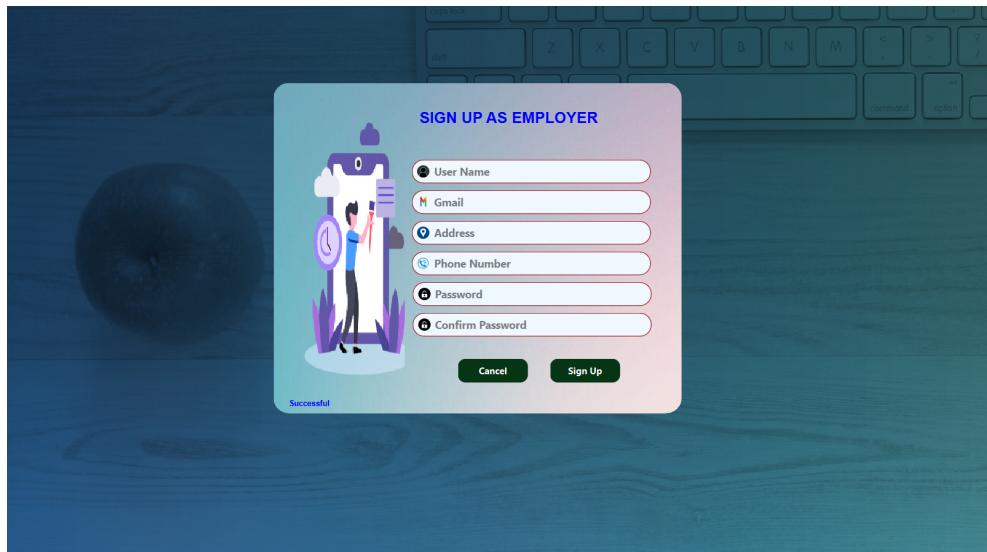
The project is still in its developing phase . In the future we would make the system online. We are planning to update and improvise the search algorithm so as to show the suggestion with each alphabet entered. We plan to make the system more secure with mandatory use of stronger password with at least 8 word. We you improvise the input methods for qualitative improvement. In the next version we are thinking of limiting the applicants in respect to their qualification and include the system of sending email of application , CV and documents for evaluation. We are further planning on collaborating with our friends working on ‘Karyalaya’ an office management system to develop a combined system for better job searching and applying for the jobseekers as well as response for the application ,appointments for interview .

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APPENDIX





Update Profile

Company Name

Description

Phone Number

Address

Successful

Update Profile

First Name

Last Name

Phone Number

Address

Education

Current Company