

Project Report
on
"Job Enrollment System"

Diploma in Computer Engineering
Year 2020-2021

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Submitted To



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**The Maharaja Sayajirao University of Baroda
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The Maharaja Sayajirao University of Baroda
Year 2020-2021

CERTIFICATE

This is to certify that the project titled “Job Enrollment System” has been carried out satisfactory by Ghanshyam Oza (2018033800136181), Yash Upadhyay (2018033800135935), Dhruv Shah (2018033800136285), Devershi Dalwadi (2018033800138527) under the guidance of Ms. Ruchita Tailor and Ms. Pooja Parmar, in the partial fulfilment of the Diploma in Computer Engineering – HPP (Final Semester) as a part of course curriculum in Diploma of Engineering during the academic year 2020 -2021.

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ABSTRACT

Online Job Enrollment System provides the platform for both company (who needs quality candidates) and Jobseeker (who needs the job). In this system, company or organization can post their job vacancies and Jobseeker can view this job opportunity and apply for that particular job. The system will provide reliable and smarter enrollment using CV analysis, personality and aptitude test and facility to shortlist candidates from large number of candidates.

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Chapter – 1

Introduction

CHAPTER 1: INTRODUCTION

1.1 Problem Statement :-

Online Job Enrollment System provides the platform for both company (who needs quality candidates) and Jobseeker (who needs the job). In this system, company or organization can post their job vacancies and Jobseeker can view this job opportunity and apply for that particular job. The system will provide reliable and smarter enrollment using CV analysis, personality and aptitude test and facility to shortlist candidates from large number of candidates.

1.2 Motivation :-

In this digital era, some people find instead of traditionally applying for jobs, on applying online it will be cost effective, easy and flexible. Even for companies in traditional way it is cumbersome for them to check each and every application that meets their requirements. The companies generally have to work hard for searching the quality candidates, and even candidates have to find new vacancies from papers, cuttings advertisements, different websites, articles, etc. and also have to pass through a long tedious paper based and expensive process. Currently there are many multinational companies that have their online job portal, but what about small or medium level companies? And also for companies it is very difficult to keep records for application of different candidates. So here a need of automation is recognized.

1.3 Objective :-

The main objective of the proposed system is to benefit both company(basically for small or medium level) to get the skilled and experienced candidates and for the candidates to apply efficiently for different positions in his/her particular field of interest, to collaborate both the companies and candidates on one platform, also, making an automated system that can shortlist the employees based on their performance in technical and aptitude test and their resume analysis with respect to the company's preferred resume., to give the company

appropriate candidate according to company's criteria for its benefit. And other major goal is to solve personality related problems for job seekers by giving personality test to identify the candidate's adapting nature and his logic of thinking for the benefit of company. Also to automate the record keeping and tracking of different applications given by candidates.

1.4 Scope of the Project :-

The job enrollment system is basically for both Job seekers and the company. This system helps the human resource department to find skilled employees for their company, and job seekers to find an appropriate job in the company. The job enrollment system allows us to effectively manage the candidates and processing of their important information. The system takes much less time and money than the conventional method. Thus, the automation of the traditional application process definitely attracts both candidates and the company.

Chapter – 2

System Requirements

CHAPTER 2: SYSTEM REQUIREMENTS

2.1 Hardware Requirements:-

- Processor: Minimum 1 GHz; Recommended 2GHz or more.
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more.
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above.

2.2 Software Requirements:-

- Operating System: Windows , Mac or Linux
- Web Browser : All industry standard web browsers (Internet Explorer, Mozilla-Firefox, Google Chrome , Apple Safari)

2.2.1 Microsoft Visual Studio

Microsoft Visual Studio is the most popular Integrated Development Environment (IDE). It is used to develop computer programs, web applications, websites, mobile apps, etc. It has a rich set of extensions or plug-ins. Because of these extensions, it supports almost every well-known language. Microsoft Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Store, Windows Presentation Foundation, and Microsoft Silverlight, etc. Using visual studio developers can easily write the programs using IntelliSense and also can manage the code effectively.

2.2.2 PHP XAMPP Server

PHP stands for Hypertext Pre-processor, which is a server-side scripting language. It is used to develop Static websites or Dynamic websites or Web applications. Almost 8 out of every 10 websites that you visit on the Internet are using PHP in some way. For developing a PHP website in offline mode on your local computer you need a local web server installed on your local machine, at this point XAMPP Server comes into action.

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends. It is an abbreviation for cross-platform, Apache, MySQL, PHP, and Perl, and it allows you to build a PHP website offline, on a local web server on your computer. This simple and lightweight solution works on Windows, Linux, and Mac – hence the “cross-platform” part. One such very important functionality provided by XAMPP is the creation of the MySQL database. This is done by using phpMyAdmin.

Chapter - 3

System Analysis

CHAPTER 3: SYSTEM ANALYSIS

3.1 Study of current system:-

Except for multi-national companies, most of the companies don't have an efficient way to find new employees. They have to work hard to find quality candidates. They manually have to manage all the records of the candidates who applied for the job in particular field, and if the records are large in number then it becomes very cumbersome for the company to maintain the records on the paper. Moreover, Job Enrollment website like naukari.com, LinkedIn are also used by companies and jobseekers to find jobs but these websites only provide bridge i.e. Using this platform they meet each other but company not take their personality test , shortlist the candidate etc. A jobseeker also finds it difficult to search for a suitable job, though they are highly educated, yet they are unemployed. Candidates have to pass through a very long, sometimes paper-based, and expensive process. Moreover, due to an increase in the number of users, the process becomes more difficult. There are also some issues due to personality differences because it is very hard to get a candidate who can contribute nicely to company's benefit, but, most of the current systems whether any multi-national companies' job portal or traditional processes doesn't provide personality tests.

3.2 Proposed System:-

The current system has much more shortcomings, for eliminating those issues we proposed the system called "Job Enrollment System Using Aptitude test and CV Analysis". The proposed system provides an efficient link between job seekers and the company's human resource department. There are two main modules in the system: 1. Admin and 2. job seeker. Admin is a person from the human resource department, which is responsible to manage the data of the whole website. Here, Admin can log in with the Username and Password (which is provided by the company) into the website to access the control panel.

The system has the facility to manage the profile of the company, where the company can manage its profile by posting or updating the job vacancies of different fields, required skills for that vacancy, and can take aptitude and personality tests (this all work is done through admin).

A job seeker is someone who wants to get an appropriate job in the company. In this system, Candidates have to create an account by registering with an email id and they can

add their knowledge, skills, projects, experience, certificates, qualifications, etc. in their CVs. They can also modify the details or can add something new to those details. They can also find part-time jobs, internship programs, full-time jobs, etc. Here, Candidates can search and apply for jobs in any field through advanced search capabilities.

And for applying for a particular job they need to perform the two major actions:

- Upload important documents (which are mandatory for any job)
- Attend the aptitude and personality test

As we mention above system will conduct two different types of tests, namely, aptitude test and personality test. From these tests, the company will be able to know the knowledge in the field for which he/she applied and logic of thinking, appearance, the mindset of an applicant. It will find out how knowledgeable and skilled a person is. For taking tests admin can add, update or delete the questions. The system will also be able to track the cursor and keyboard movements of the candidate while giving a test. If any suspicious activity is caught, that candidate will be automatically disqualified after giving a certain number of warnings. There will also be a time slot decided by the company for taking a test within which the candidate has to complete it.

After tests, the system will automatically generate the result of both tests. The system will rank and shortlist the candidates based on the result of different tests and CV analysis (with respect to preferred CV for the job) of an applicant. If any candidate can select for a particular job then they receive a notification on its website profile panel as well as on its registered email address.

Unlike conventional systems, the proposed system has less chance of getting any error like any misplacing of a record. The system will automatically store each entry of the applied candidates efficiently in a separate database or can easily update any incorrect data. The admin can remove any application that is not able to satisfy the company's requirements.

3.3 Feasibility Study:-

The prime focus of the feasibility study is practicality evaluation of the proposed system keeping in mind several factors. It is the study of the system proposal made to identify whether the user needs may be satisfied using the current software and hardware technologies.

It determines the size of the proposed system, the cost of producing it, and benefits to be achieved from the system.

Following are the main factors on which feasibility study of a particular system is done:

- 1) Technical Feasibility
- 2) Economical Feasibility
- 3) Operational Feasibility

3.3.1 Technical Feasibility

Technical Feasibility determines whether the technologies used for the proposed system are available in the market for development and its availability. It gives a report about the proposed system technologies and hardware/software requirements.

The proposed system is a website made by standard languages like HTML, CSS, and JavaScript for User Interface.

The proposed system is technically feasible because the project was developed in high-end technologies like Bootstrap framework and PHP language for the backend.

The key process areas of the proposed system are nicely amenable to automation and hence the technical feasibility is proved beyond doubt.

3.3.2 Economical Feasibility

The proposed system will provide more benefits with fewer costs. Different technologies used for developing system are open source and free of cost. It is like a freeware resource that can be used without any cost.

It requires a web server and internet connection which are the primary need for manage the data of the website.

Benefits will be that company and candidate both can collaborate with each other with minimal or no cost and it also reduces the use of papers and manual employees in the process of recruitment.

From the above factors, the proposed system is definitely economically feasible.

3.3.3 Operational Feasibility

Operational Feasibility is the study to determine how a system is easier for a user to operate and its maintenance.

The present system has automated most of the manual tasks. It automatically generates the result of aptitude and personality tests and it also has an algorithm to automatically shortlist the candidates based on their performance in tests and CV analysis of applicants.

The proposed system is a user-friendly website that is much easier for the user to maintain and can easily understand the process. They can also modify their personal details and all details can be stored in a separate database and the company can track that how many candidates applied for which job. So this can too help the company to keep track of the number of candidates automatically. Here, job seekers can easily search for jobs according to their references. So, training of employers is not an issue.

The maintenance of the data in the system is not a tedious task because the system will have a separate database for storing each and every record where the record can be handled efficiently rather than that on paper. Therefore the proposed system will increase the operational efficiency of both the company and the job seeker.

Chapter – 4

System Design

CHAPTER 4: SYSTEM DESIGN

4.1 Data dictionary:-

Table 1: Job seeker basic details

Description: This table contains the information about the basic job seeker's details.

Table 4.1 Jobseeker_Basic_Details

Sr. No.	Field Name	Data Type	Size	Constraints	Description
1.	JS_Id	Int	16	Primary key	It contains the job seeker id.
2.	JS_FirstName	Varchar	20	Not null	It contains the first name of student.
3.	JS_LastName	Varchar	20	Not null	It contains the last name of the job seeker.
4.	JS_EmailID	Varchar	20	Not null	It contains the email id of job seeker.
5.	JS_Password	Varchar	16	Not null	It contains the Password of the job seeker.
6.	JS_Qualification	Varchar	20	Not null	It contains the qualification of the job seeker.
7.	JS_TestMarks	Int	5	Not null	It contains the marks gain by job seeker in enrollment test.
8	Test_ansID	Int	16	Foreign Key	It contains the job seeker's test ans id.

Table 2: Jobseeker Personal details

Description: this table contains the information about the job seeker's personal details.

Table 4.2 Jobseeker_Personal_Details

Sr. No.	Field name	Data type	Size	Constraints	Description
1.	JS_Id	Int	10	Foreign key	It contains jobseeker id.
2.	JS_Name	Varchar	20	Not null	It contains jobseeker full name.
3.	JS_Profession	Varchar	20	Not null	It contains the profession of jobseeker.
4.	JS_Language	Varchar	20	Not null	It contains the language name of jobseeker.
5.	JS_Age	Int	10	Not null	It contains jobseeker age.
6.	JS_Csalary	Int	10	Not null	It contains the current salary of jobseeker.
7.	JS_Esalary	Int	10	Not null	It contains the expected salary of jobseeker.
8.	JS_Description	Varchar	50	Not null	It contains description about jobseeker.
9.	JS_Phone	Int	10	Not null	It contains phone number of jobseeker.
10.	JS_Email	Varchar	20	Not null	It contains email address of jobseeker.
11.	JS_Country	Varchar	10	Not null	It contains country of jobseeker.
12.	JS_City	Varchar	10	Not null	It contains city of jobseeker.
13.	JS_Address	Varchar	30	Not null	It contains address of jobseeker.

Table 3: Jobseeker resume details

Description: This table contains the information about the job seeker's resume.

Table 4.3 Jobseeker_Resume_Details

Sr No.	Field name	Data type	Size	Constraints	Description
1.	JSR_Id	Int	10	Primary key	It contains the job seeker's resume id.
2.	JSR_Headline	Varchar	50	Not null	It contains the short introduction of job seeker in resume.
3.	JSR_Skills	Varchar	50	Not null	It contains the skills of job seeker.
4.	JSR_Education	Varchar	100	Not null	It contains the education/qualification of job seeker.
5.	JSR_Projects	Varchar	100	Not null	It contains the projects done by job seeker.
6.	JSR_File	BLOB	2	Not null	It contains the job seeker's resume file.
7.	JS_Id	Int	10	Foreign key	It contains jobseeker id.

Table 4: Jobseeker Saved Jobs details

Description: This table contains the information related to the saved jobs by job seeker.

Table 4.4 Jobseeker_Saved_Jobs_Details

Sr. No.	Field name	Data type	Size	Constraints	Description
1.	SJ_Id	Int	10	Primary key	It contains the saved job id.
2.	JS_Id	Int	10	Foreign key	It contains jobseeker id.
3.	Job_Id	Int	10	Foreign key	It contains the job id.

Table 5: Jobseeker Applied jobs details

Description: This table contains the information related to the job seeker's applied jobs.

Table 4.5 Jobseeker_Applied_Job_Details

Sr. No.	Field name	Data type	Size	Constraints	Description
1.	AJ_Id	Int	10	Primary key	It contains the applied job id.
2.	Job_Id	Int	10	Foreign key	It contains the job id.
3.	JS_Id	Int	10	Foreign key	It contains jobseeker id.

Table 6: Admin_Details

Description: This table contains the information about the admin of the system.

Table 4.6 Admin_Details

Sr. No	Field Name	Data Type	Size	constraints	Description
1.	Admin_Id	Int	10	Primary Key	It contains admin id.
2.	A_UserName	Varchar	20	Not null	It contains the user name of the admin.
3.	A_EmailID	Varchar	30	Not null	It contains the email id of admin.
4.	A_Password	Varchar	10	Not null	It contains the password of the admin.

Table 7: Job details

Description: This table contains the information related to the job.

Table 4.7 Job_Details

Sr. No	Field Name	Data Type	Size	Constraints	Description
1.	Job_Id	Int	10	Primary key	It contains the job id.
2.	J_Name	Varchar	40	Not null	It contains the job name.
3.	J_Type	Varchar	40	Not null	It contains the type of the job.
4.	J_Designation	Varchar	40	Not null	It contains the job designation .
5.	J_KeySkill	Varchar	50	Not null	It contains the key skill required for job.
6.	J_Qualification	Varchar	40	Not null	It contains the required qualification for job.
7.	J_Salary	Int	10	Not null	It contains the salary of job.
8.	J_Experience	Varchar	30	Not null	It contains the experience required for the job.
9.	J_Place	Varchar	20	Not null	It contains the place of job.
10.	J_Vacancies	Int	10	Not null	It contains the total vacancies available for a particular job.
11.	J_Date	Date	10	Not null	It contains the last date for applying the job.

Table 8: Enrollment Test details

Description: This table contains the information about the Enrollment test.

Table 4.8 Enrollment_Test_Details

Sr. No	Field Name	Data Type	Size	Constraints	Description
1.	EN_TestID	Varchar	20	Primary key	it contains the enrollment test id.
2.	ENT_Type	Varchar	20	Not null	It contains the type of enrollment test.
3.	ENT_Marks	Int	10	Not null	It contains the maximum marks in the test.
4.	ENT_Date	Date	10	Not null	It contains the date of test.
5.	ENT_Duration	Int	10	Not null	It contains the duration of the time.

Table 9: Test Questions details

Description: This table contains the information about the questions to be asked in the enrollment test.

Table 4.9 Question_Details

Sr. No	Field Name	Data Type	Size	Constraints	Description
1.	Q_SetID	Int	10	Primary key	It contains the question set id.
2.	Q_Number	Int	10	Not null	It contains the question number in the particular question set.
3.	Q_Main	Varchar	100	Not null	It contains the question of the question set.
4.	Q_OptionNumber	Int	10	Not null	It contains the option number of the question.
5.	Q_Option	Varchar	50	Not null	It contains the option of the question.
6.	Q_Answer	Varchar	50	Not null	It contains the answer of the question.

Table 10: Company Profile details

Description: This table contains the information related to the company's profile.

Table 4.10 Company_Profile_Details

Sr. No	Field Name	Data Type	Size	Constraints	Description
1.	C_Name	Varchar	30	Primary key	It contains the name of the company.
2.	C_Emp	Int	10	Not null	It contains the number of employees working in the company.
3.	C_Awards	Int	10	Not null	It contains the number of awards won by company.
4.	C_Cust	Int	10	Not null	It contains the number of customers served by company.
5.	C_Values	Varchar	300	Not null	It contains the company values.

Table 11: Test marks

Description: This table contains the test answers of the job seeker.

Table 4.11 Test_marks

Sr. No	Field Name	Data Type	Size	Constraints	Description
1	Test_ansID	Int	16	Primary Key	It contains the job seeker's test ans id.
2	Start_Time	DATETIME	80	Not null	The time when user starts test
3	End_Time	DATETIME	80	Not null	The time when user completes his test
4	Ans_NO1	Varchar	50	Not null	This is the answer given by user for question1
5	Ans_NO2	Varchar	50	Not null	This is the answer given by user for question2
6	Ans_NO3	Varchar	50	Not null	This is the answer given by user for question3
7	Ans_NO4	Varchar	50	Not null	This is the answer given by user for question4
8	Ans_NO5	Varchar	50	Not null	This is the answer given by user for question5
9	Ans_NO6	Varchar	50	Not null	This is the answer given by user for question6
10	Ans_NO7	Varchar	50	Not null	This is the answer given by user for question7
11	Ans_NO8	Varchar	50	Not null	This is the

					answer given by user for question8
12	Ans_NO9	Varchar	50	Not null	This is the answer given by user for question9
13	Ans_NO10	Varchar	50	Not null	This is the answer given by user for question10
14	Ans_NO11	Varchar	50	Not null	This is the answer given by user for question11
15	Ans_NO12	Varchar	50	Not null	This is the answer given by user for question12
16	Ans_NO13	Varchar	50	Not null	This is the answer given by user for question13
17	Ans_NO14	Varchar	50	Not null	This is the answer given by user for question14
18	Ans_NO15	Varchar	50	Not null	This is the answer given by user for question1
19	JS_TestMarks	Int	5	Not null	It contains the marks gain by job seeker in test.

4.2 Data Flow Diagram (DFD)

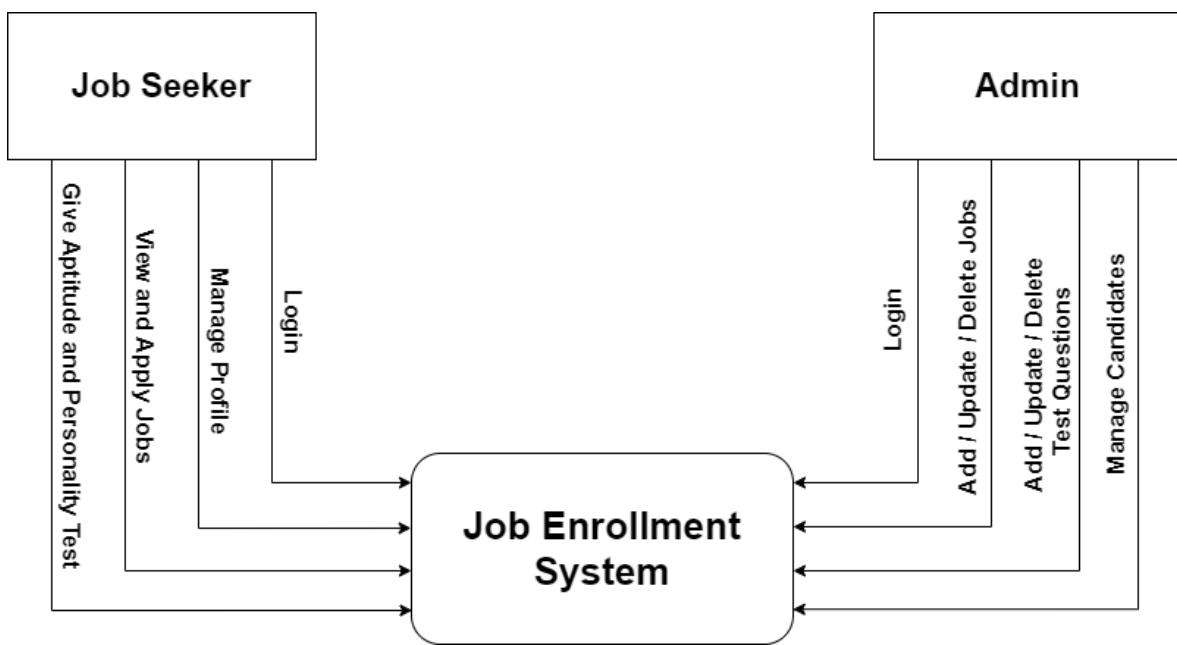
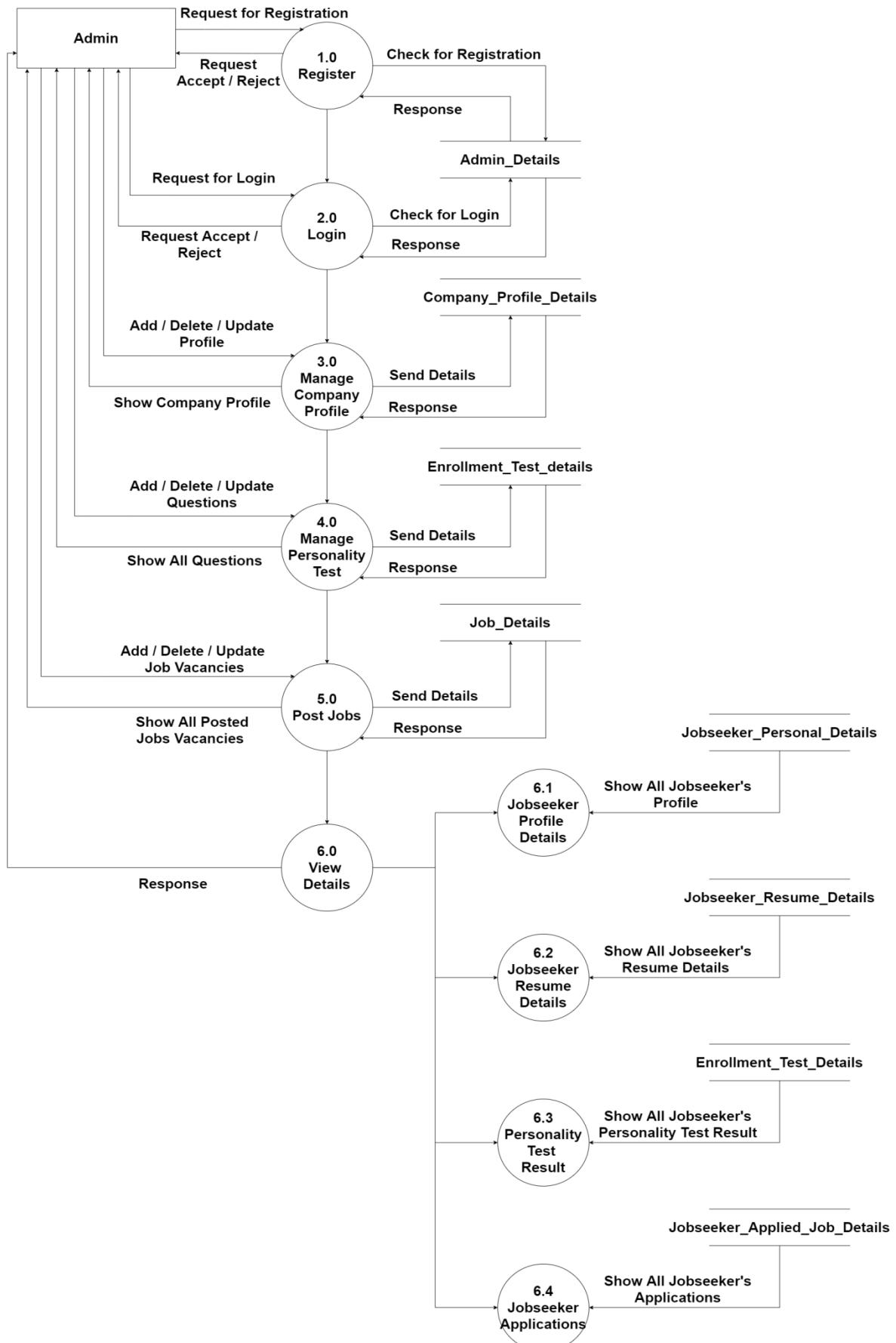
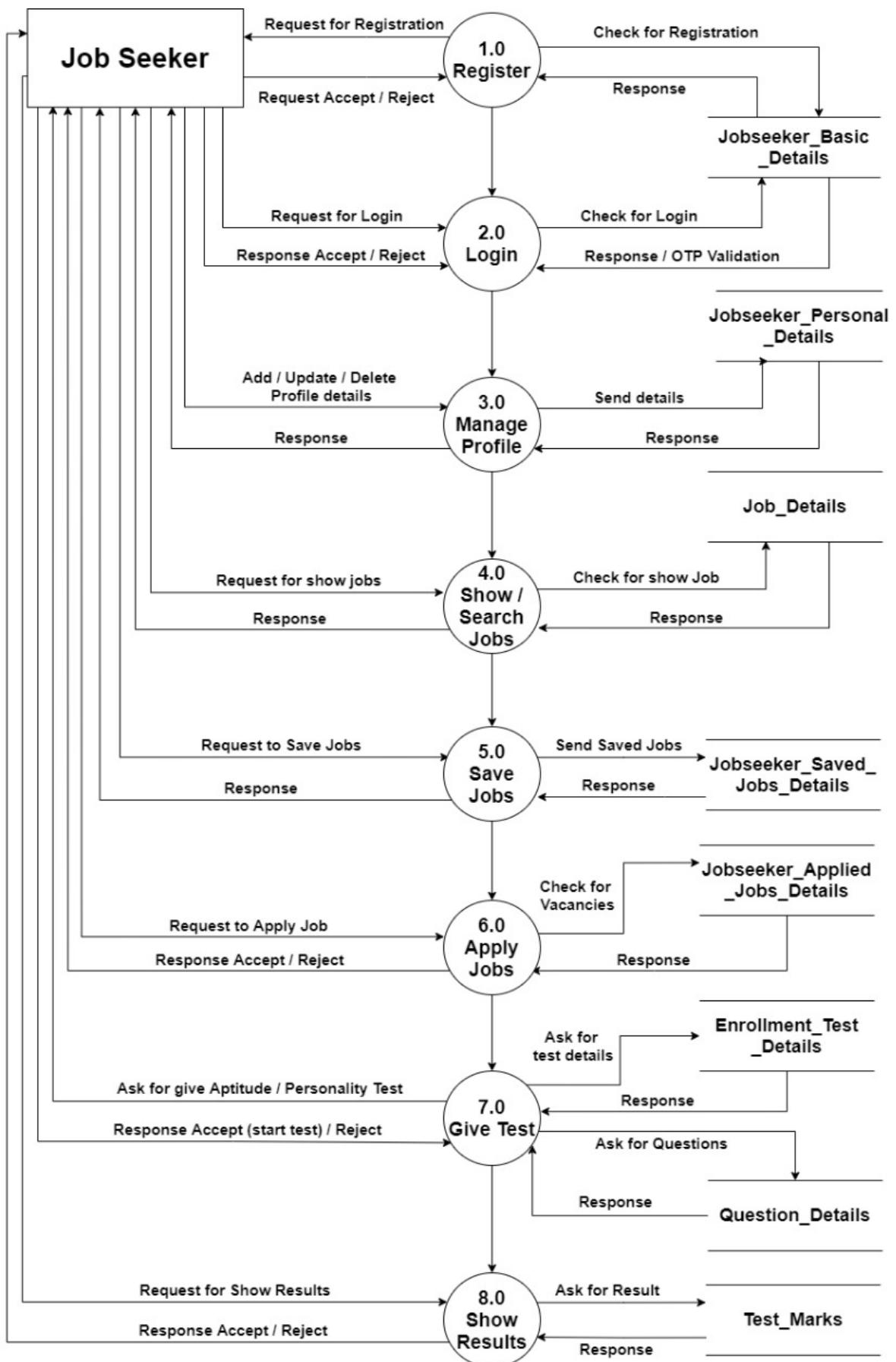


Fig 4.1 Level 0 Data Flow Diagram

**Fig 4.2** Level 1 Data Flow Diagram for Admin

**Fig 4.3** Level 1 Data Flow Diagram for Jobseeker

4.3 Entity Relationship Diagram.

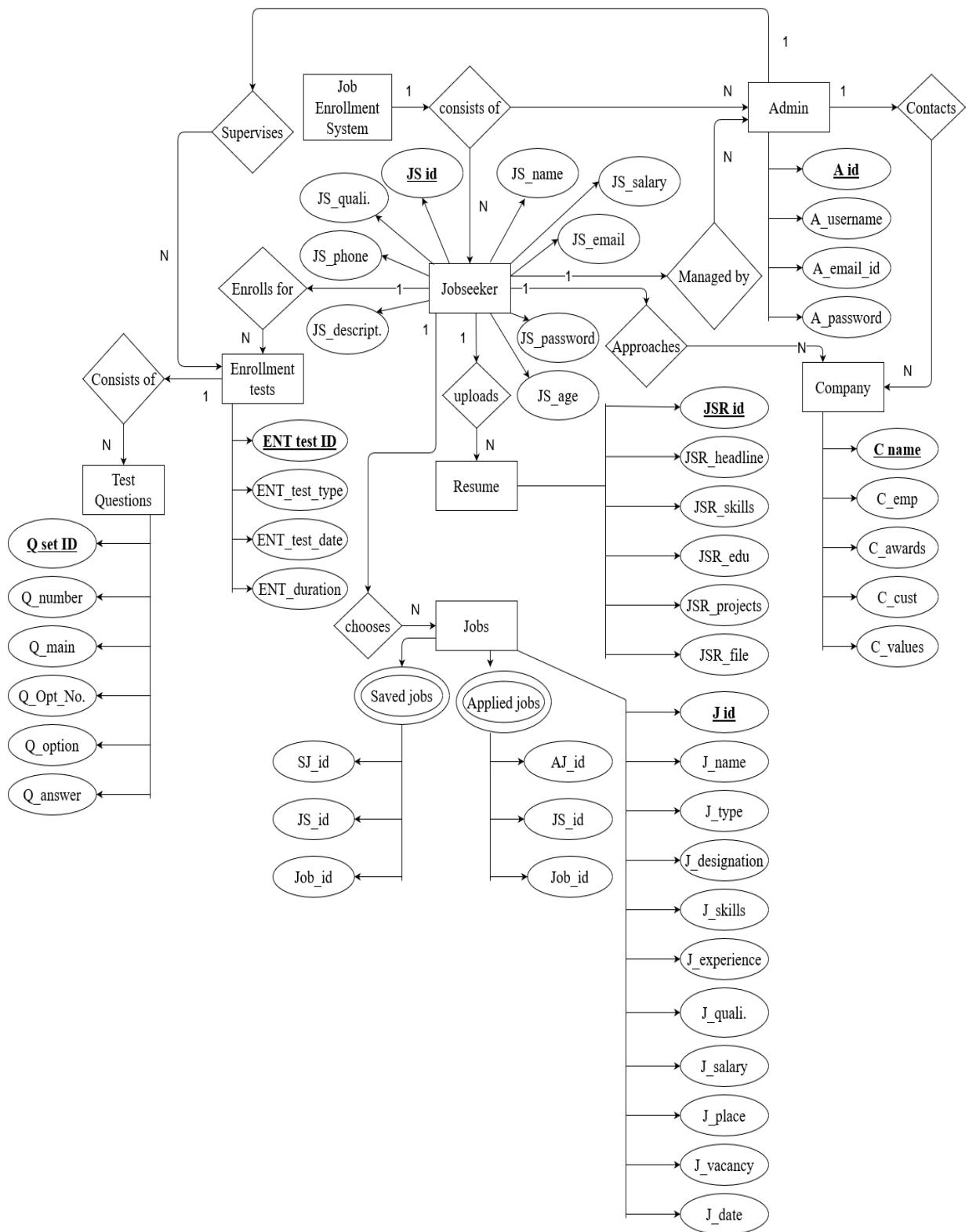


Fig 4.4 Entity Relationship Diagram

4.4 Use Case Diagram

Use Case Diagram for Login:

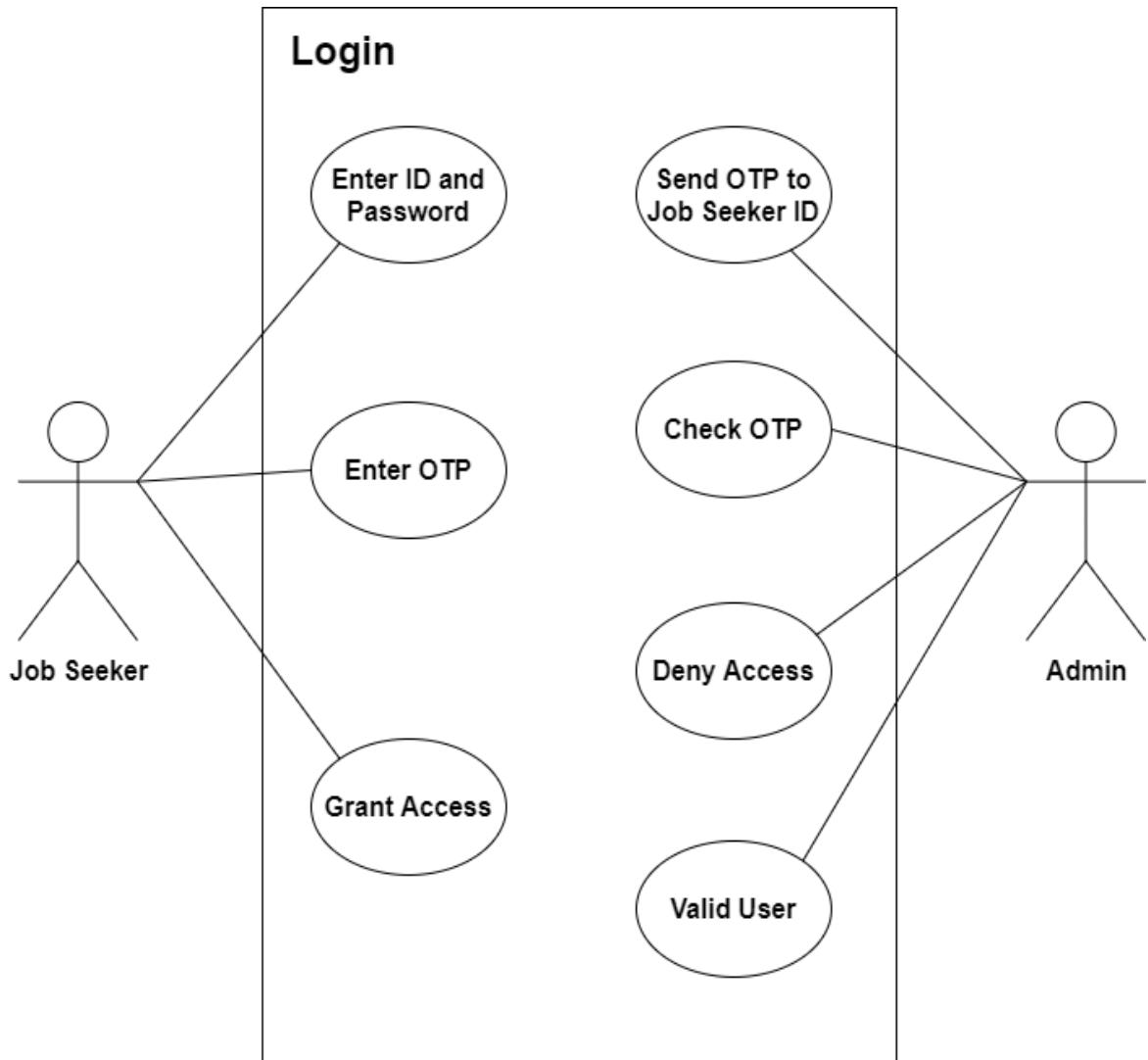


Fig 4.5 Use case diagram for Login

Use Case Diagram for Apply jobs:

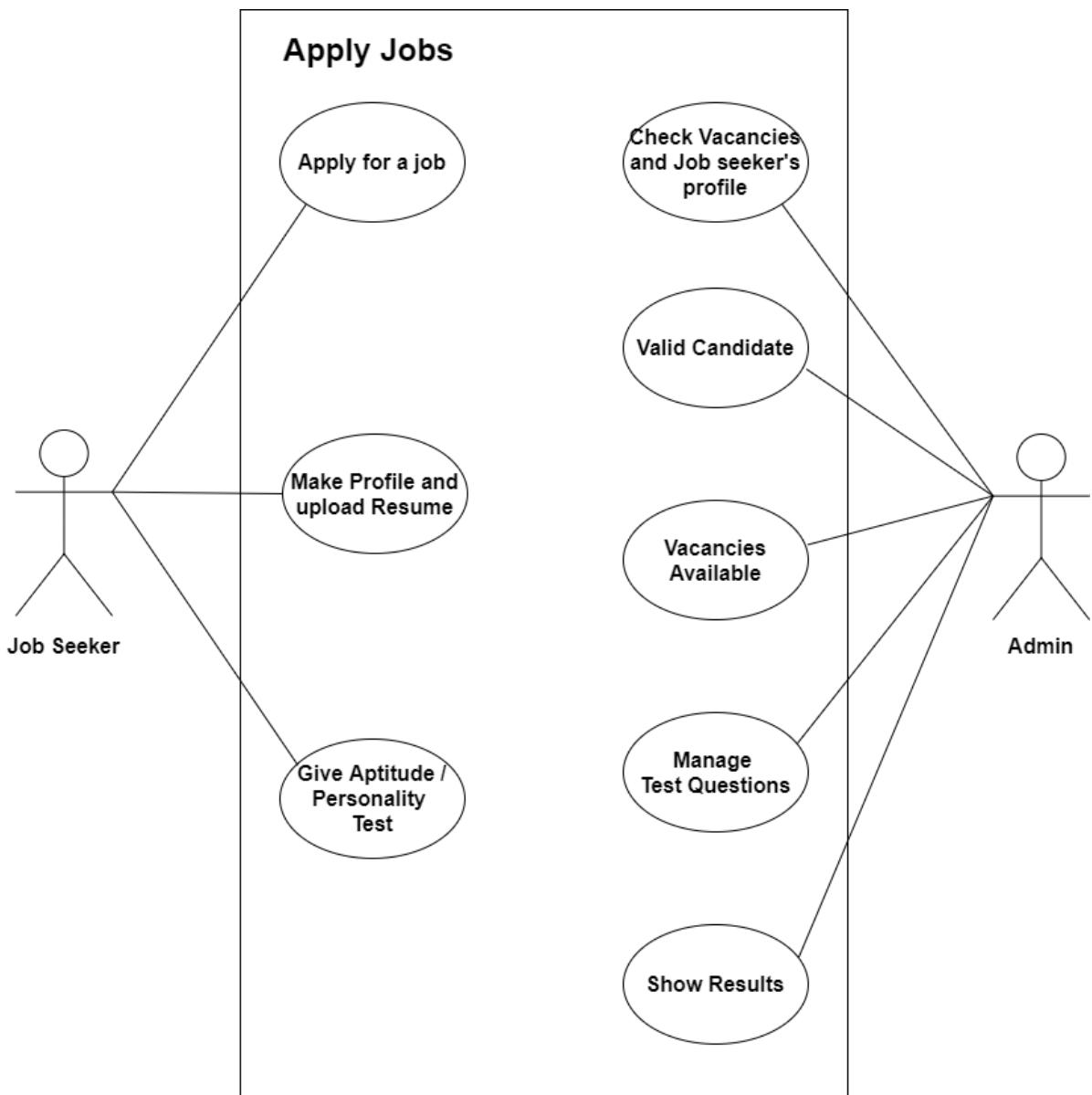


Fig 4.6 Use case diagram for Apply Jobs

Chapter – 5

Implementation

CHAPTER 5: IMPLEMENTATION

Project implementation (or project execution) is the phase where visions and plans become reality. This is the logical conclusion, after evaluating, deciding, visioning, planning, and finding the financial resources of a project. Implementation simply means carrying out the activities described in your work plan.

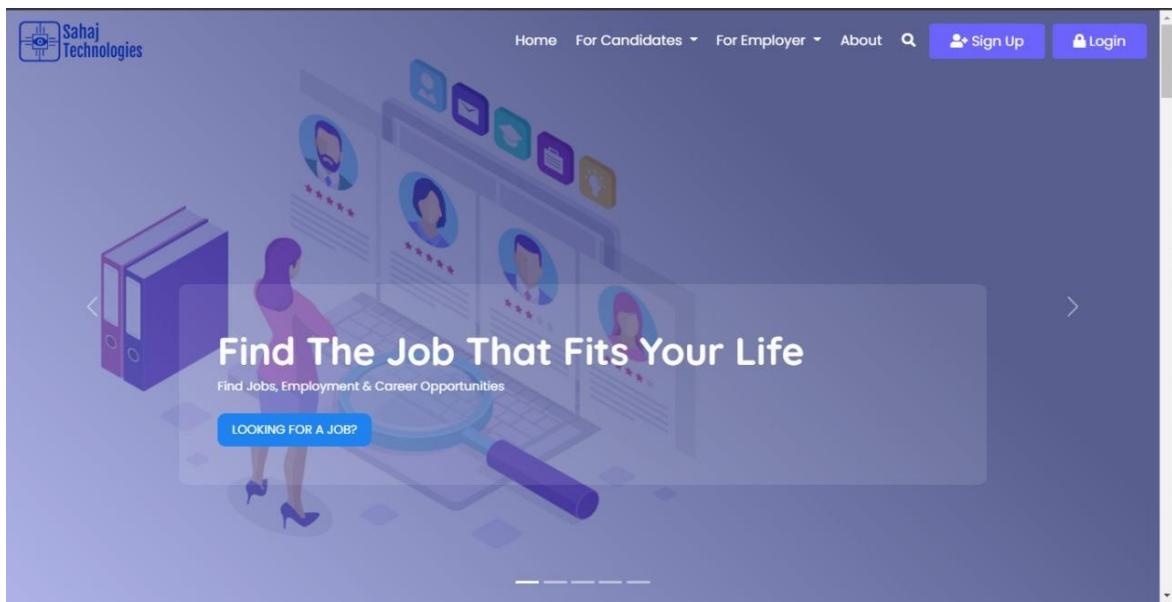
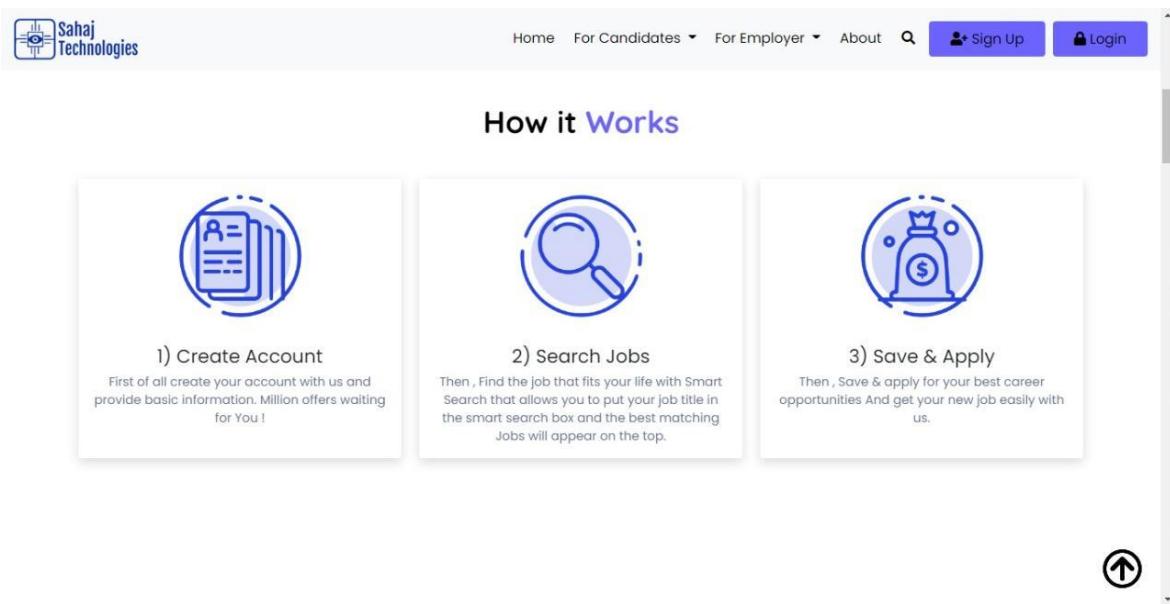
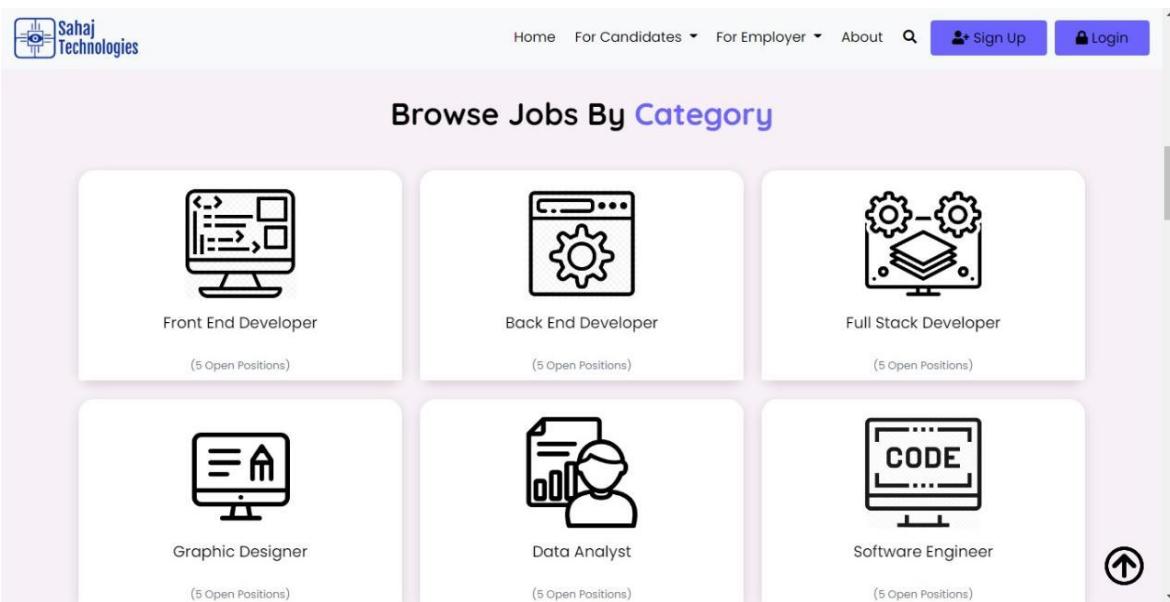


Figure 5.1 Home Page

Description: Figure 5.1 shows the Home Page of our website. In which, Job seeker and admin can sign up and login via respected buttons shown in the navigation bar. Job seeker can also watch various jobs by clicking on “Looking for a job?” button given in the middle of the page.

**Figure 5.2 How It Works**

Description: Figure 5.2 shows our website's working. This section is very useful for any new user to know the perfect way of using this website.

**Figure 5.3 Browse Jobs by category**

Description: Figure 5.3 shows the 'Browse jobs by categories' section on the home page. Job seeker can see the jobs available related to the respected categories by just clicking on the each cards.

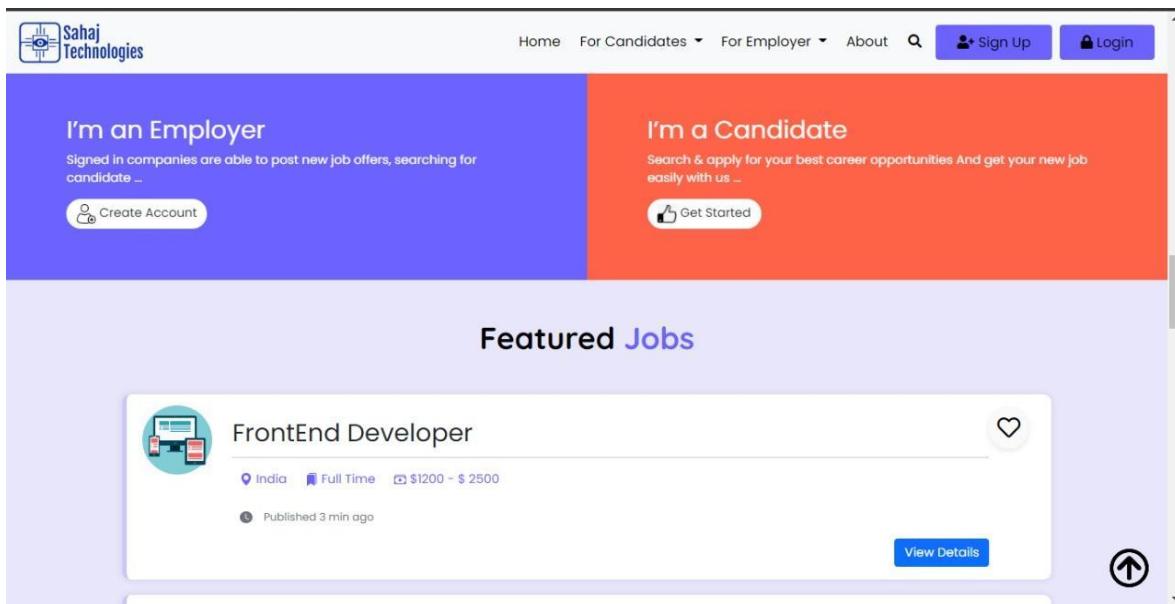


Figure 5.4 Create Account

Description: Figure 5.4 shows the Create Account section present on the home page of the website. In which, other employer and a new job seeker can create their account on clicking respected buttons present on the page.

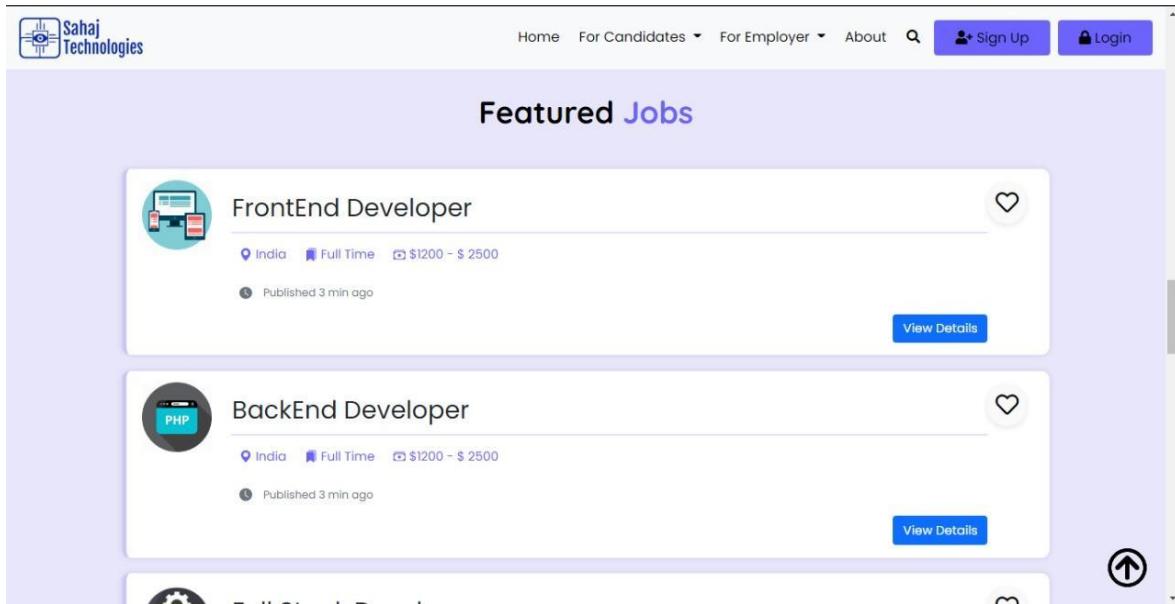
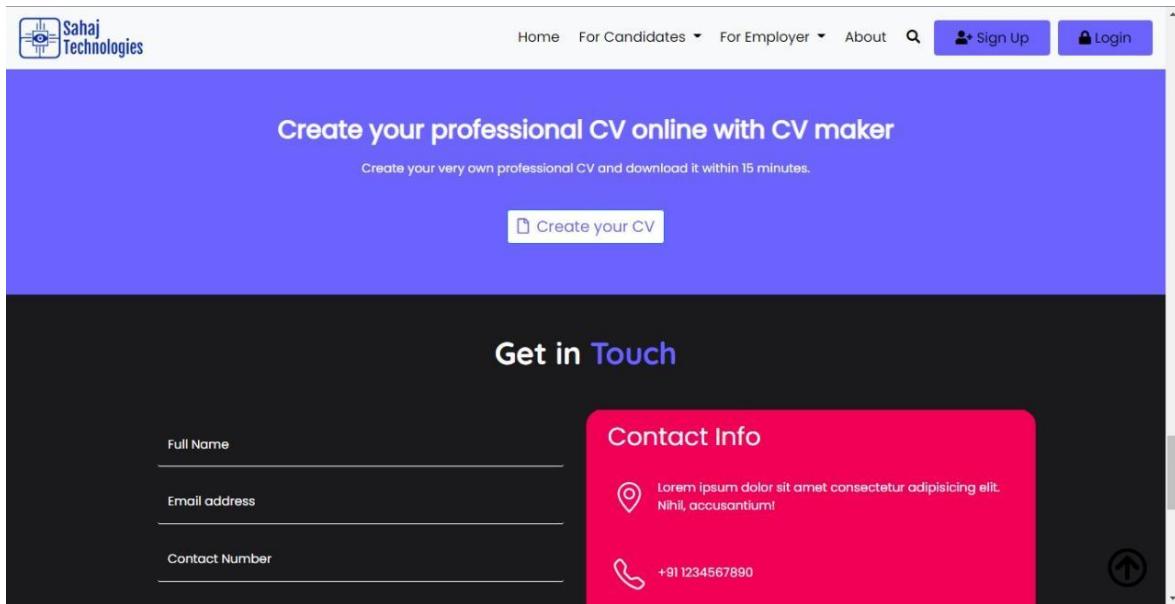
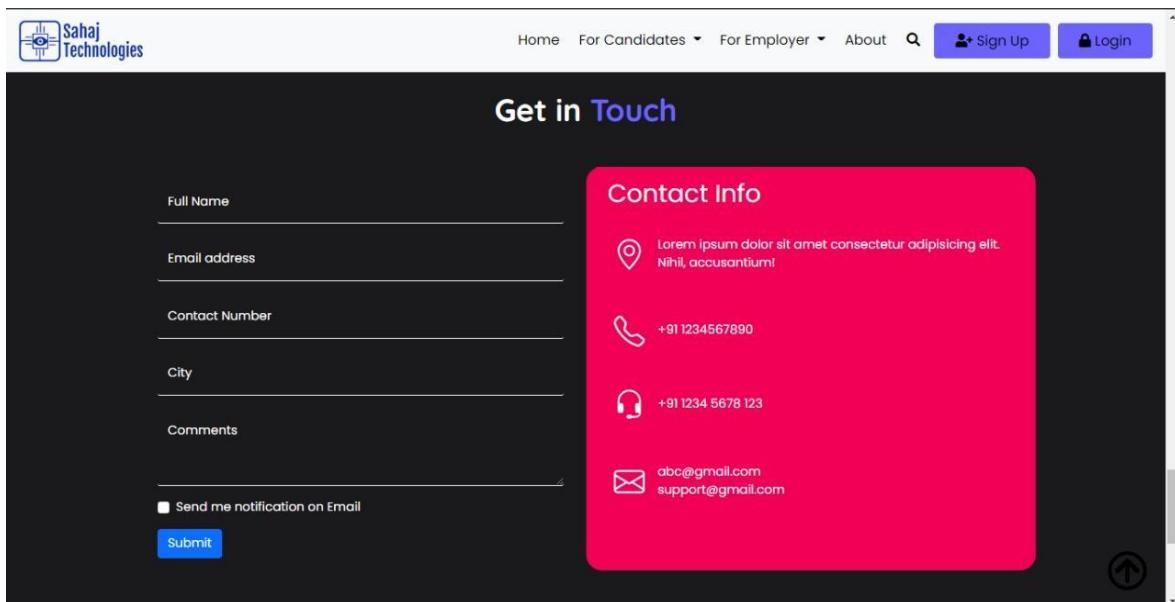


Figure 5.5 Featured Jobs

Description: Figure 5.5 shows the featured jobs add by admin of this website. Any jobseeker can add any job into its wishlist for future use.

**Figure 5.6 CV Builder**

Description: Figure 5.6 shows our website feature i.e. CV Builder. Any user can make its CV easily with us.

**Figure 5.7 Contact Us**

Description: Figure 5.7 shows the Contact Us section. By filling given form and companies different contact info job seeker or the user of the website can get in touch with company.

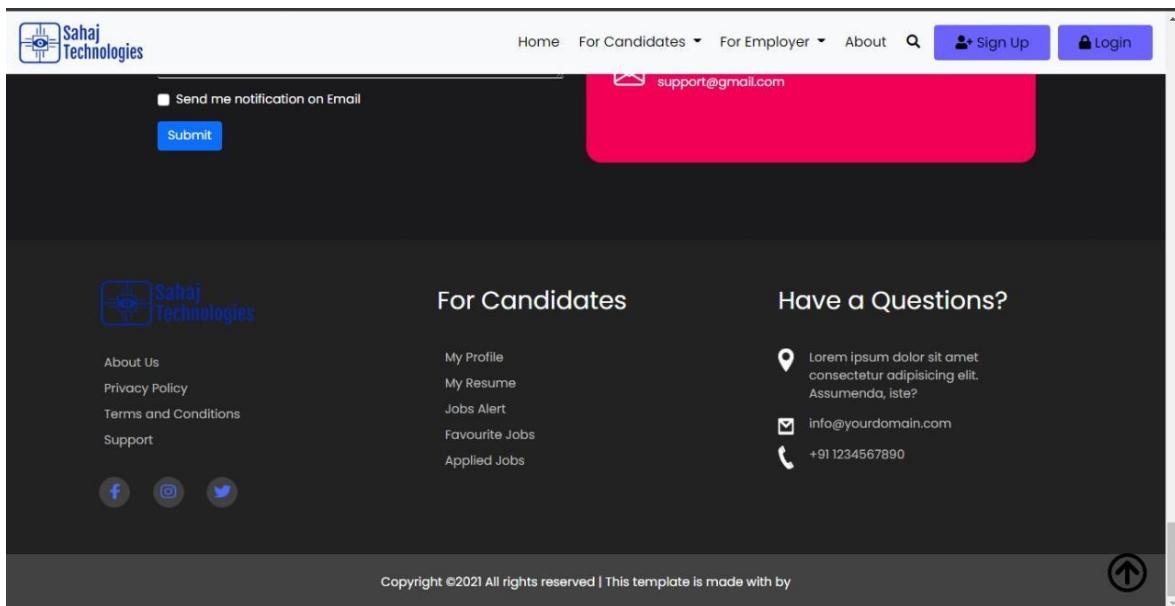


Figure 5.8 Website Footer

Description: Figure 5.8 shows our website's footer. By using this footer user can get information regarding about us, our policy, support, terms & conditions and as well as it can navigate to any page.

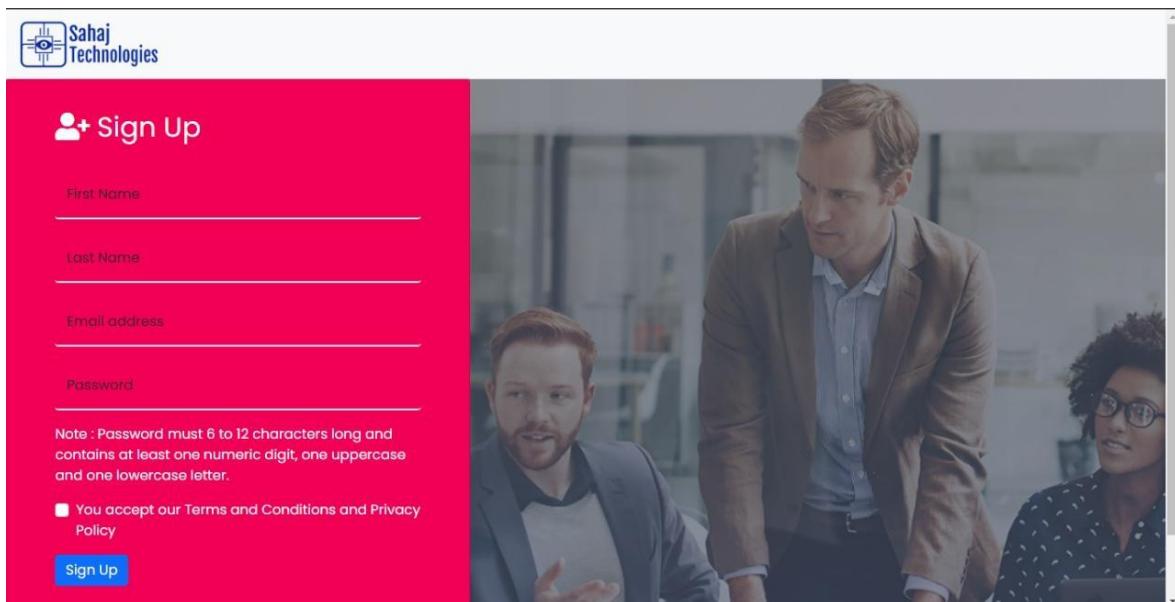


Figure 5.9 Sign Up Page

Description: Figure 5.9 shows the Sign Up page of our website. Using this page any user can create its account & collaborate with us.

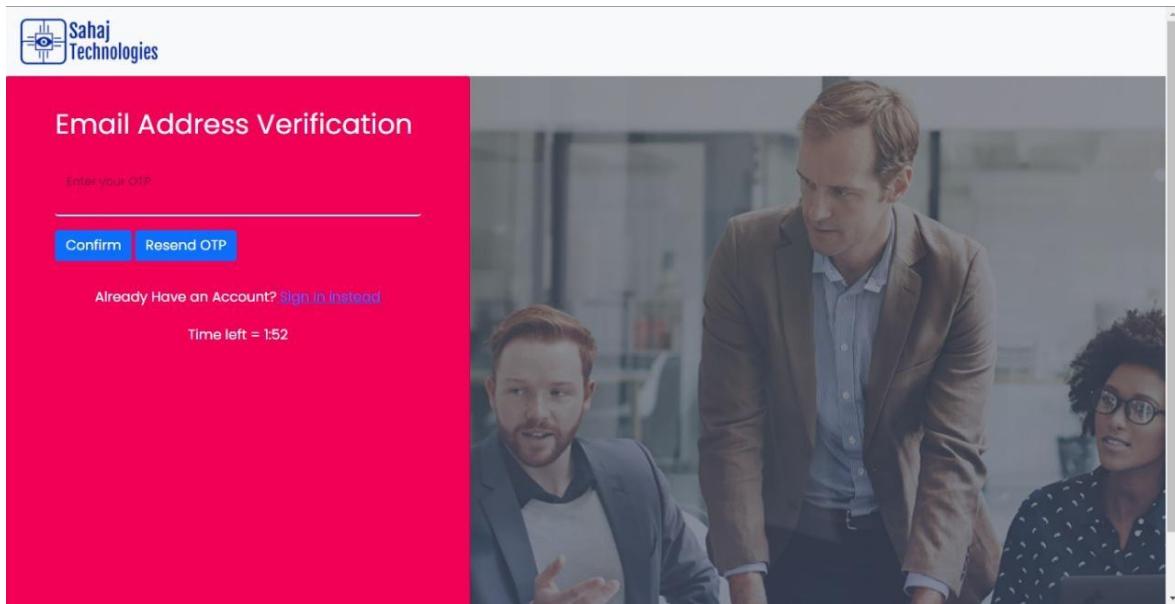


Figure 5.10 Email Verification

Description: Figure 5.10 shows the Email verification page that validates user's email address when he/she creates its account using OTP.

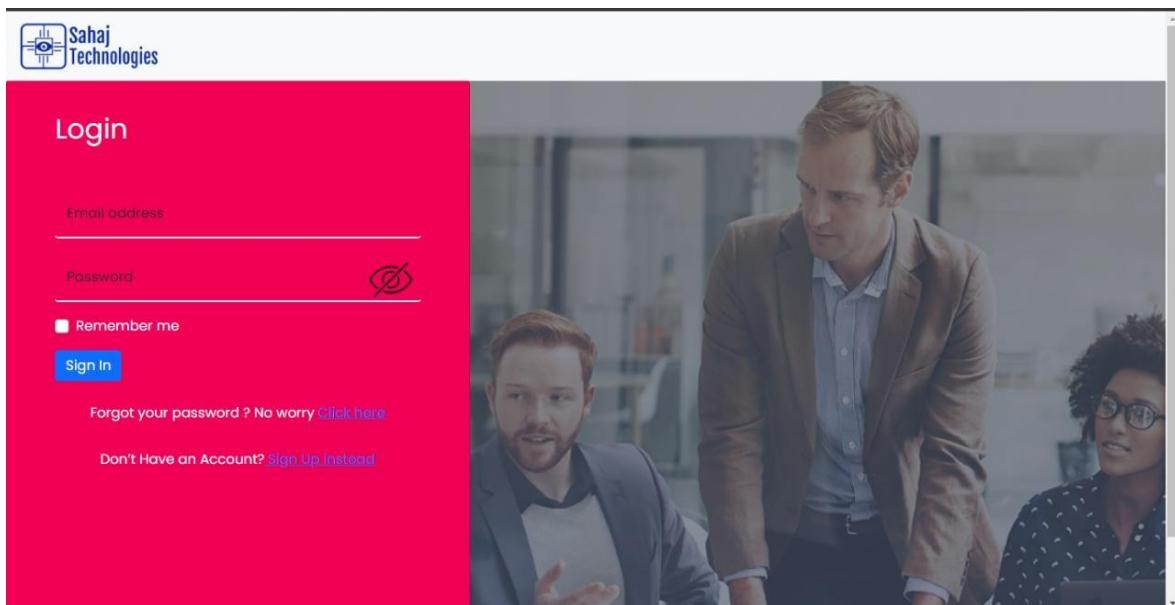


Figure 5.11 Login Page

Description: Figure 5.11 shows the login page. Using this page any user can enter in its profile using its registered email address and password.

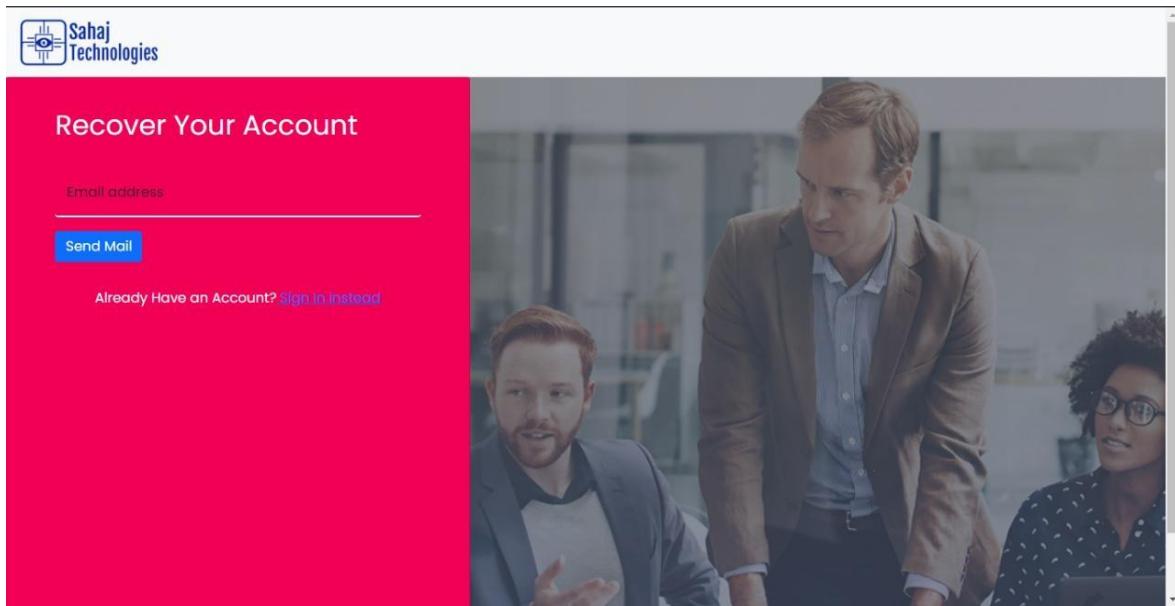


Figure 5.12 Recover Your Account

Description: Figure 5.11 shows the Recover account page using this page if any user has forgot its password then it can recover its account through creating new password.

Figure 5.13 Basic Information

Description: Figure 5.13 shows the profile page of user. Registered user can upload its image and enter its details and make its profile for future use.

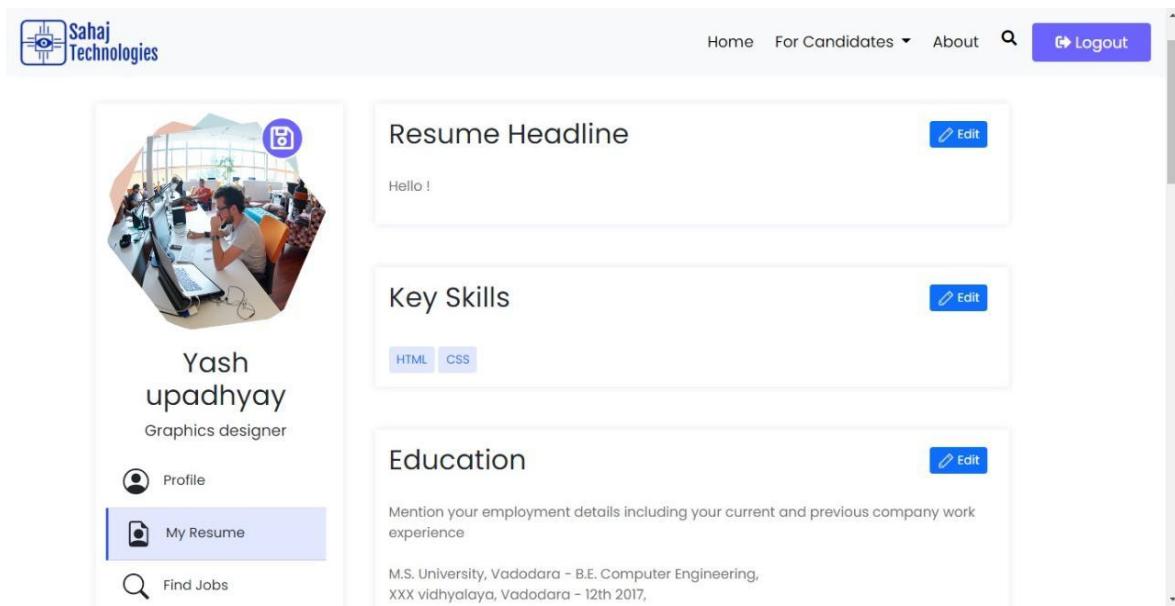


Figure 5.14 My Resume

Description: Figure 5.14 shows the resume section for jobseeker which is mandatory to generate CV in which jobseeker's input is passed to CV builder on click of button and its CV is generated from our website.

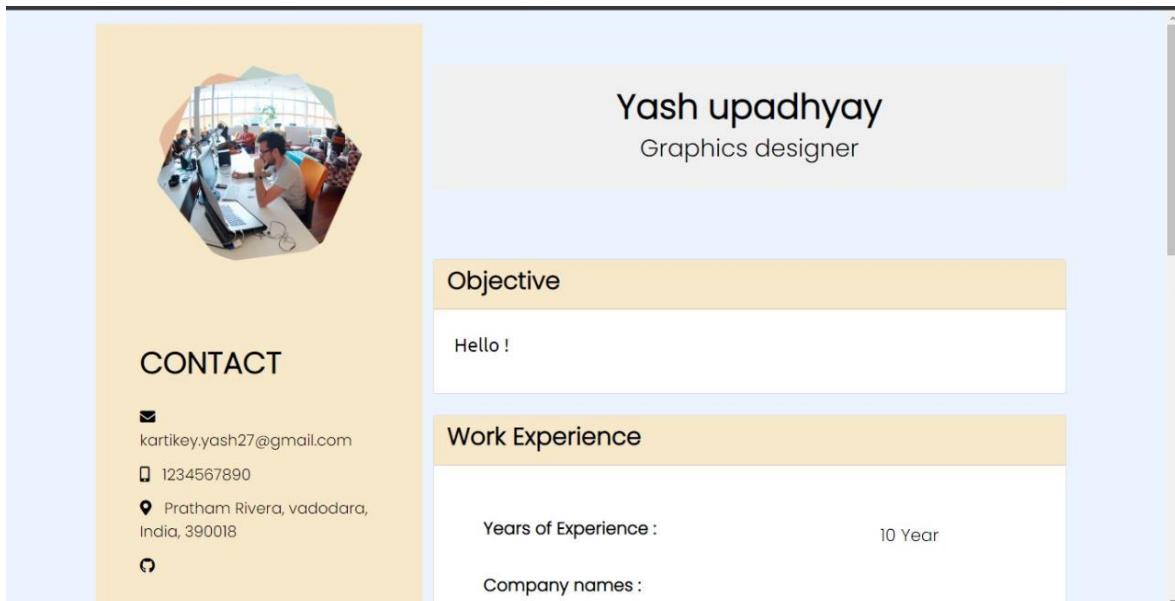


Figure 5.15 CV Builder

Description: Figure 5.15 shows the CV builder of our website where Jobseeker's CV is created based on the data provided by the Jobseeker. After generation of CV, Jobseeker can download the CV on click of a button provided at the bottom of the page.

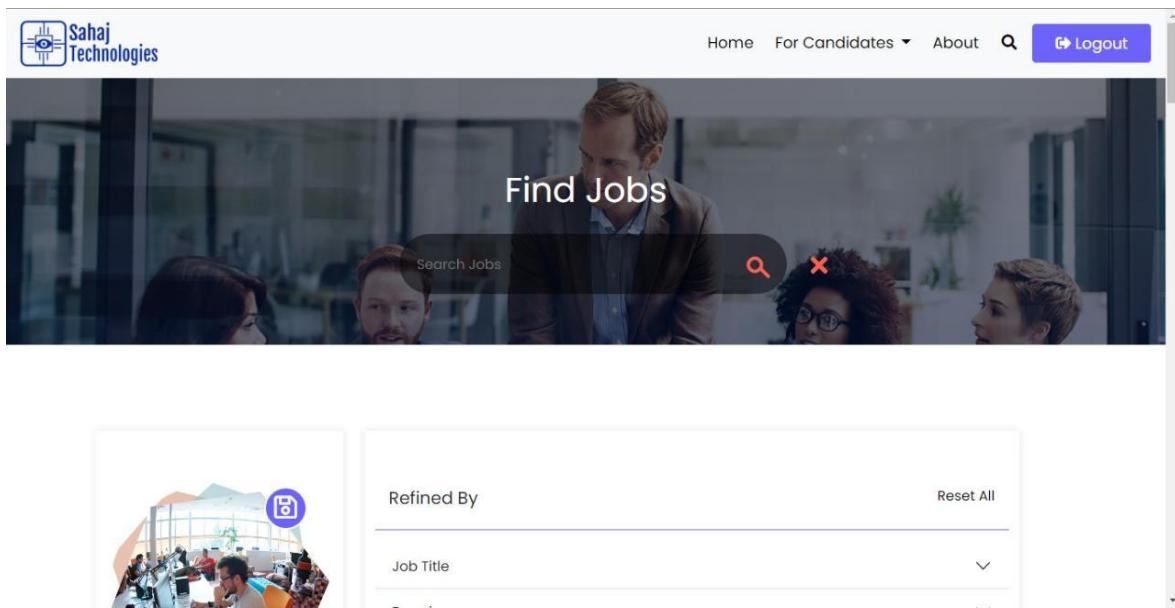


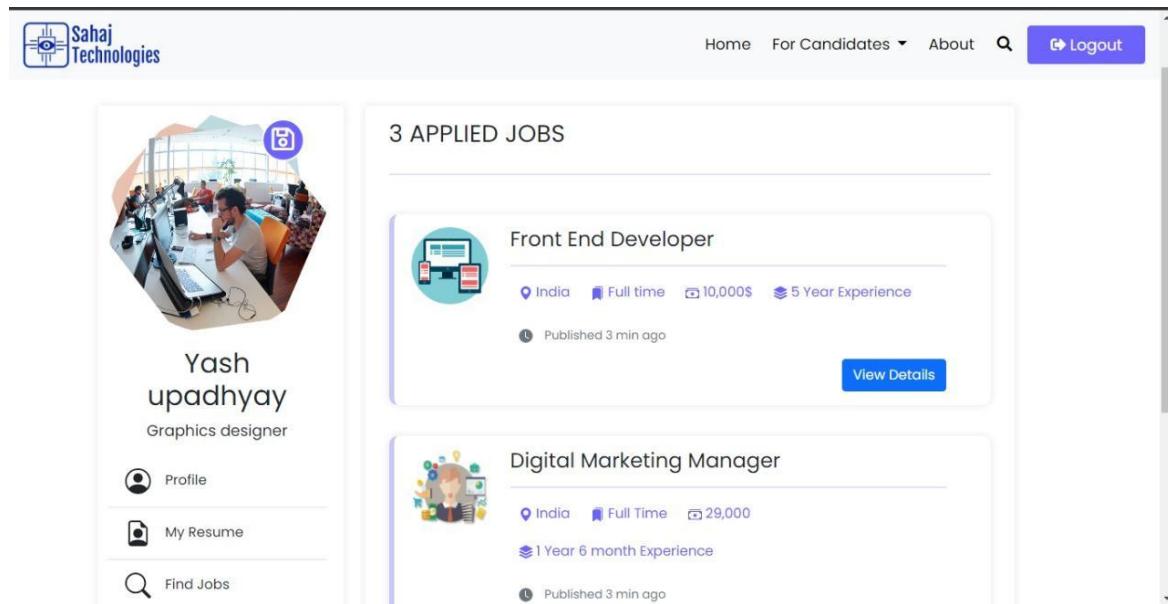
Figure 5.16 Find Jobs

Description: Figure 5.16 shows the page where Jobseeker can search for jobs based on their interest. After selection, the data will be provided of jobs available in companies, salaries, experience, etc.

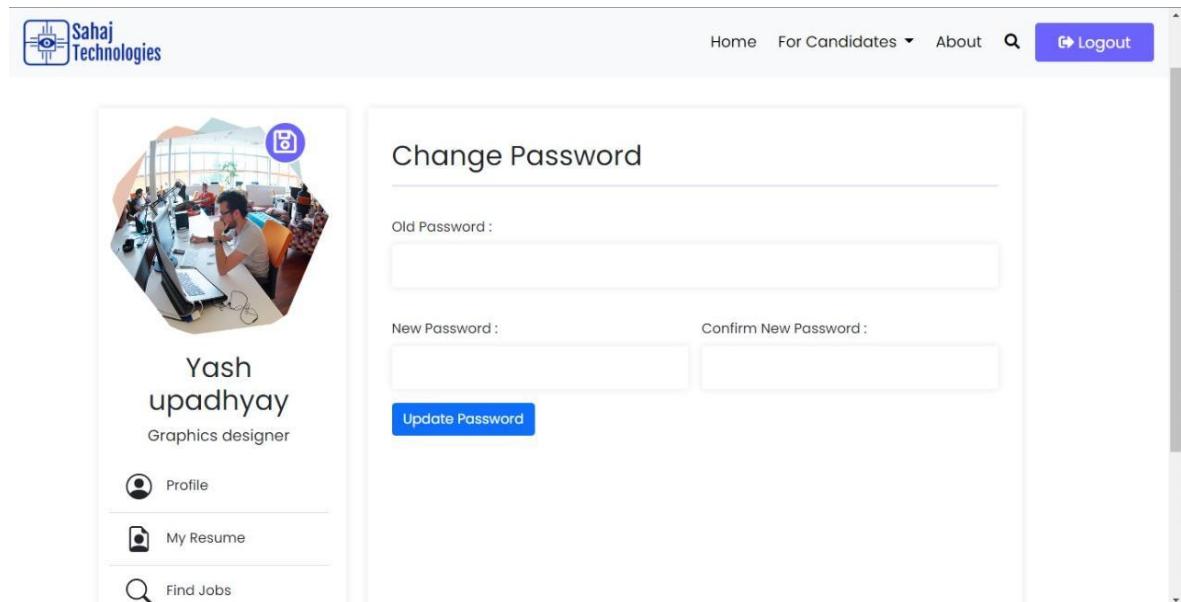
The screenshot shows the 'Saved Jobs' section of the Sahaj Technologies website. At the top, there is a navigation bar with links for 'Home', 'For Candidates', 'About', a search icon, and a 'Logout' button. Below the navigation is a sidebar with a profile picture of a person working at a desk. The main content area has a header '1 SAVED JOBS'. Below this, there is a table with three columns: 'Jobs', 'Job Type', and 'Salary'. A single job entry is listed: 'Digital Marketing Manager' (Job Type: Full Time, Salary: 29,000). To the right of the table is a navigation bar with page numbers 1, 2, 3, and a double arrow icon. On the far left, there is a sidebar with options for 'Profile', 'My Resume', and 'Find Jobs'.

Figure 5.17 Saved Jobs

Description: Figure 5.16 shows Saved jobs section where Jobseeker can save jobs based on their interests. Jobseeker can remove the job whenever they want.

**Figure 5.18 Applied Jobs**

Description: Figure 5.28 shows the applied jobs page which shows the jobs which are applied by the Jobseeker or enrolled in.

**Figure 5.19 Change Password**

Description: Figure 5.19 shows change password page where Jobseeker can change their password whenever they want or they want to create a strong password.

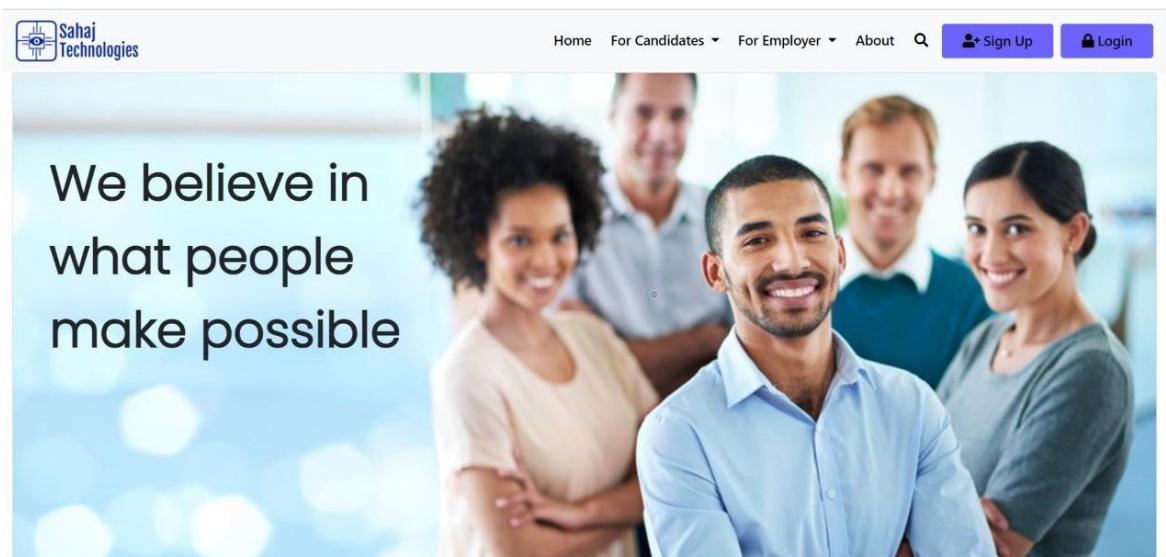


Figure 5.20 About Us

Description: Figure 5.20 shows the first Page of about us page of Sahaj Technologies. In which, company's slogan is shown with some happy employees. For easy navigation to other pages navigation bar is present on the top of the page.

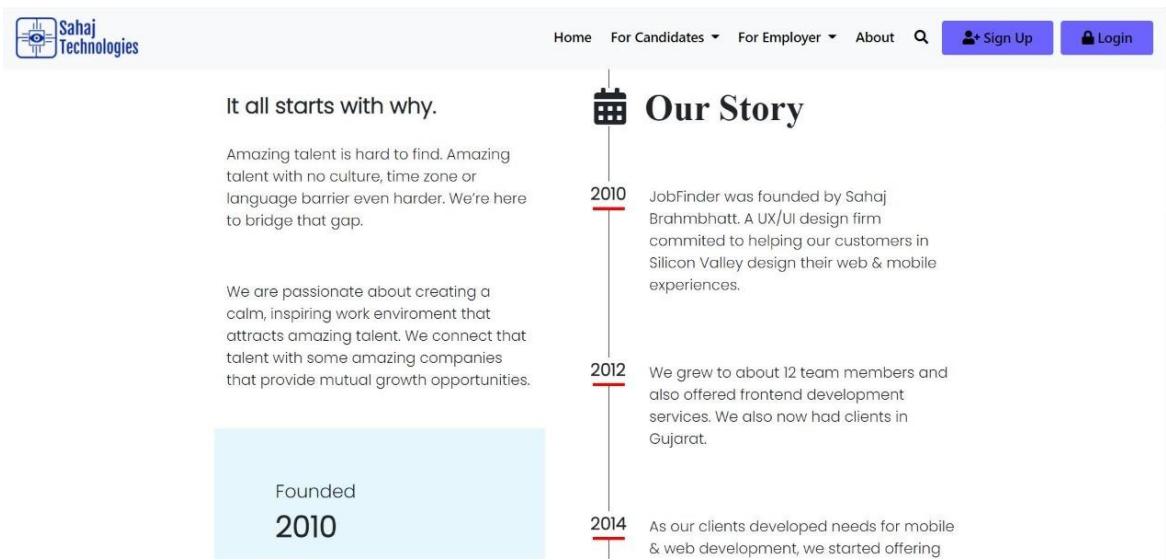


Figure 5.21 Our Story

Description: Figure 5.21 shows the journey and main motto of The Sahaj Technologies present on the about us page. This is very important section because it gives the basic idea about the company and the environment inside it.

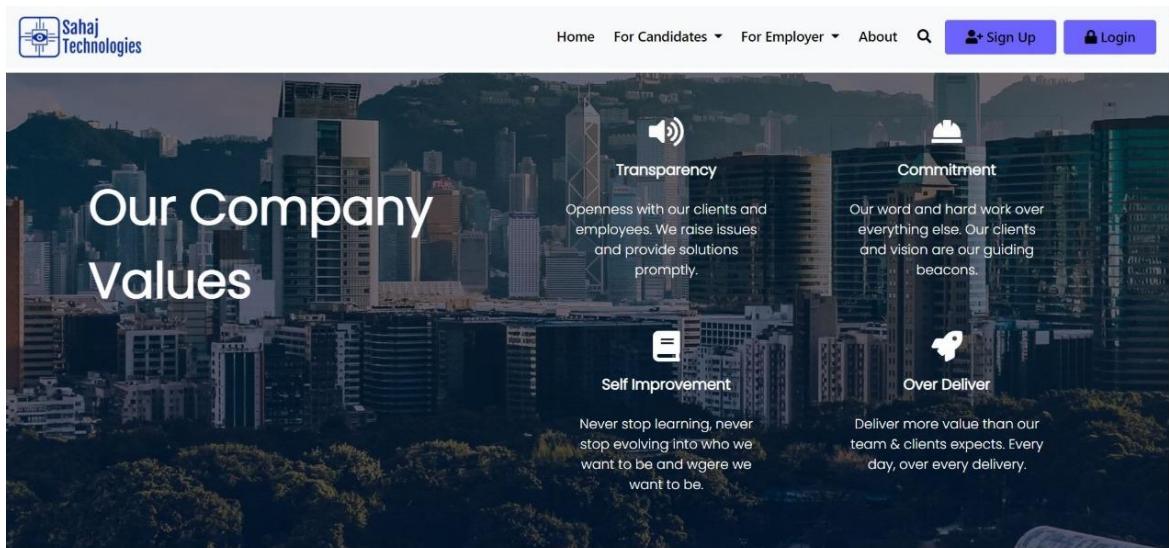


Figure 5.22 Values

Description: Every companies should have some rules-regulation or the values of company. Figure 5.22 shows the main values of the Sahaj Technologies.

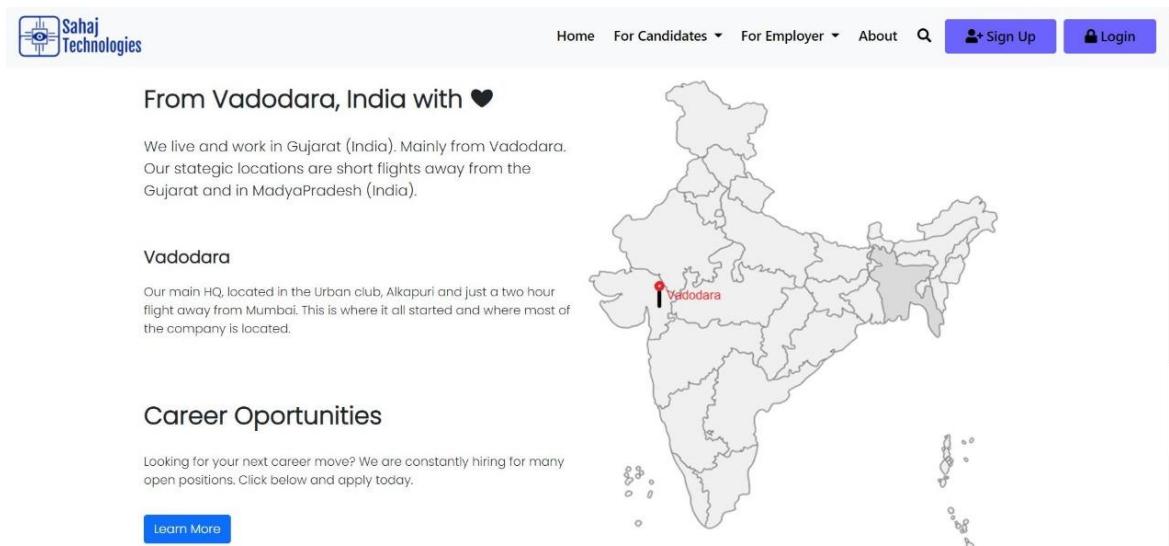
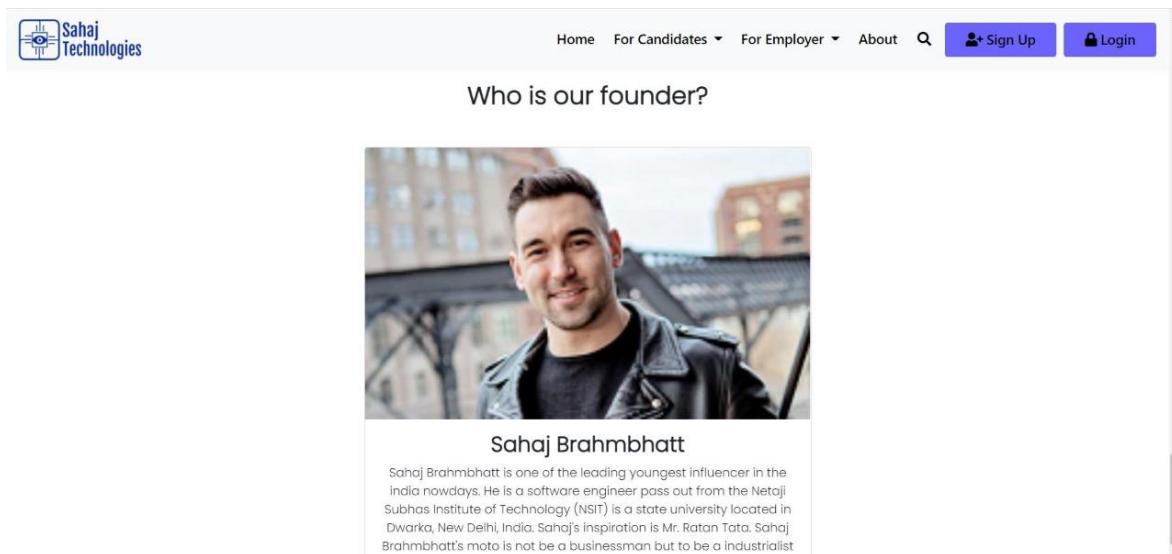
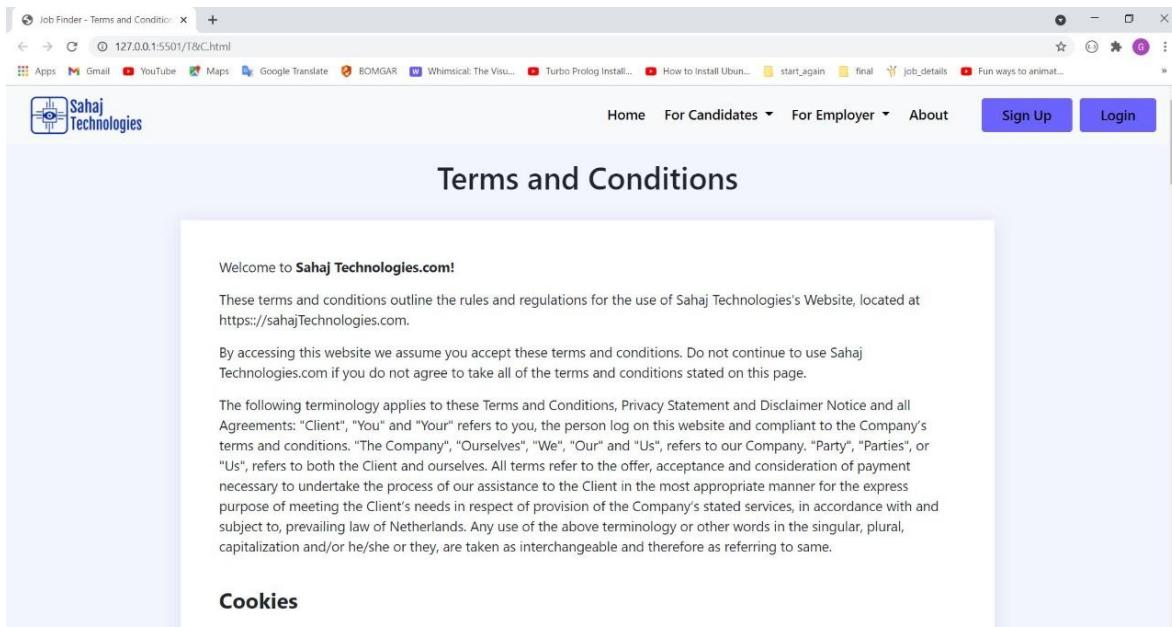


Figure 5.23 Location of Company

Description: Figure 5.23 shows the location of the company's headquarter. In which, job seeker can find and apply for a job by just clicking on the “Learn More” button present at the bottom of the section.

**Figure 5.24 Founder**

Description: Knowing the nature of founder gives brief idea about the culture inside the company. So this figure 5.24 gives some brief information about the founder of Sahaj Technologies.

**Figure 5.25 Terms and Conditions**

Description: Figure 5.25 shows the Terms and conditions page of the website, which is very crucial because Terms and conditions are aimed at protecting the business (you). They give business owners the opportunity to set their rules (within applicable law) of how their

service or product may be used including, but not limited to, things like copyright conditions, age limits, and the governing law of the contract.

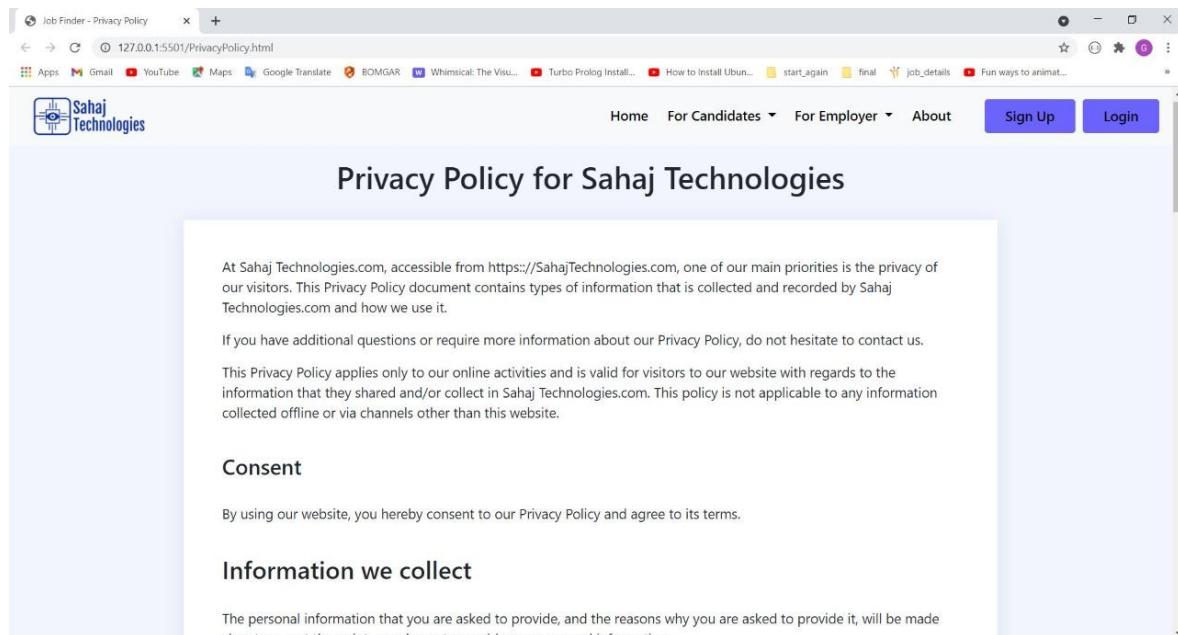


Figure 5.26 Privacy Policy

Description: Figure 5.26 shows the privacy policy page of the website. It is a set of statements or legal document (in **privacy** law) that discloses some or all of the ways a party gathers, uses, discloses, and manages a customer or client's data.

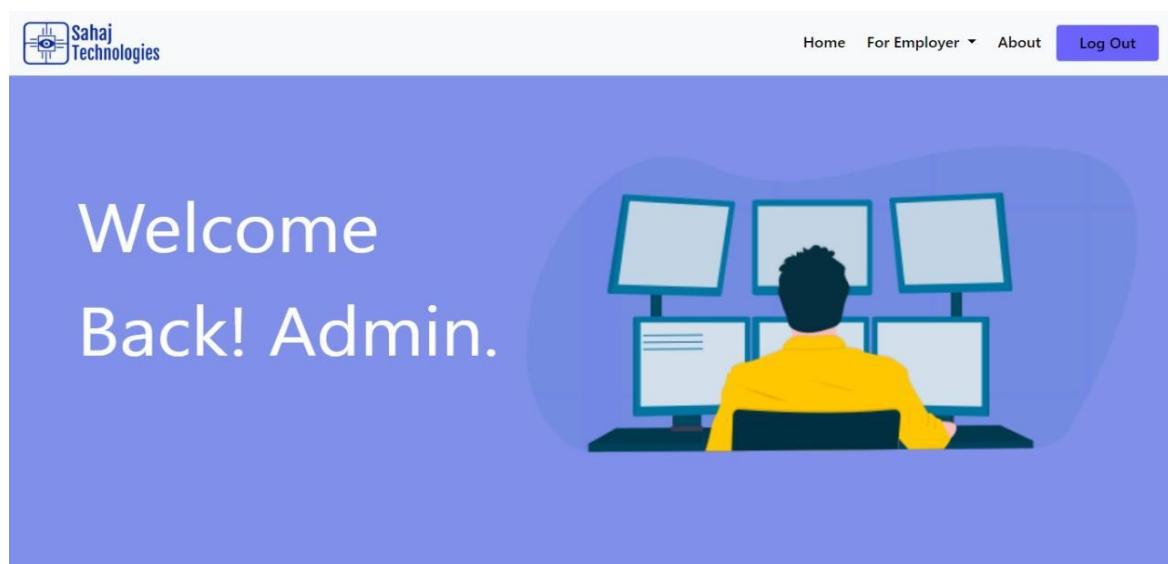


Figure 5.27 Admin Homepage

Description: Figure 5.27 shows the homepage of Admin. In this, Admin can perform various operations by clicking any options from navigation bar.

MANAGE JOBS

Select Operation:

Add Job

Enter The Job ID :

Job ID

Enter The Job Name :

Front End Developer

Enter The Job Type :

Job Type

Enter The Job Designation:

Figure 5.28 Manage Jobs

Description: Figure 5.28 shows the page where Admin can manage jobs in the website by adding, by deleting, or by updating them. This page also helps Admin whether some job is available in database or not by auto-filling input fields.

SCHEDULE ENROLLMENT TEST

Enter The Enrollment Test ID :

Enter The Enrollment Test Type :

Enter Maximum marks in Enrollment Test :

Enter The Date of Enrollment Test :

dd-mm-yyyy

Enter The Enrollment Test Duration :

Figure 5.29 Schedule Enrollment Test

Description: Figure 5.29 shows the page where Admin can schedule tests for various jobs with time period, date of test, test duration, maximum marks, etc.

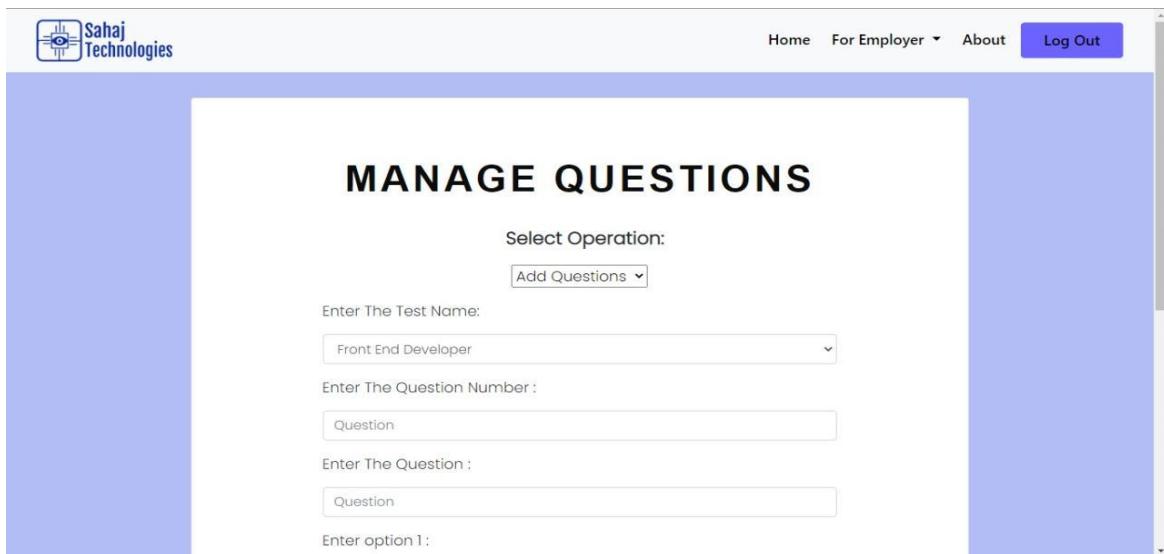


Figure 5.30 Manage Questions

Description: Figure 5.30 shows the page of manage questions in which Admin can add, update, or delete questions for tests related to personality and aptitude questions of their jobs selected.

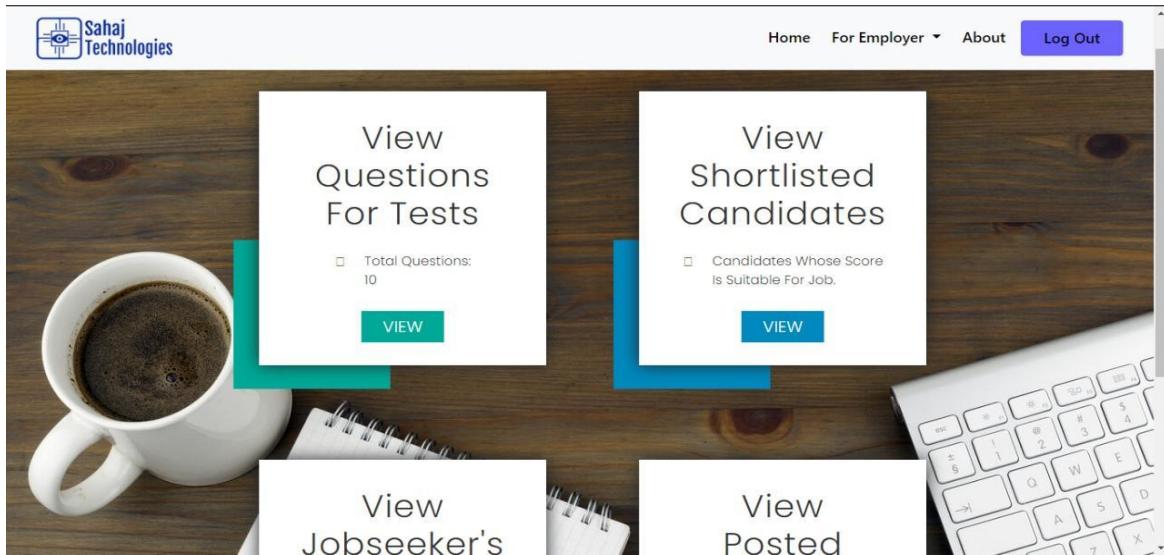
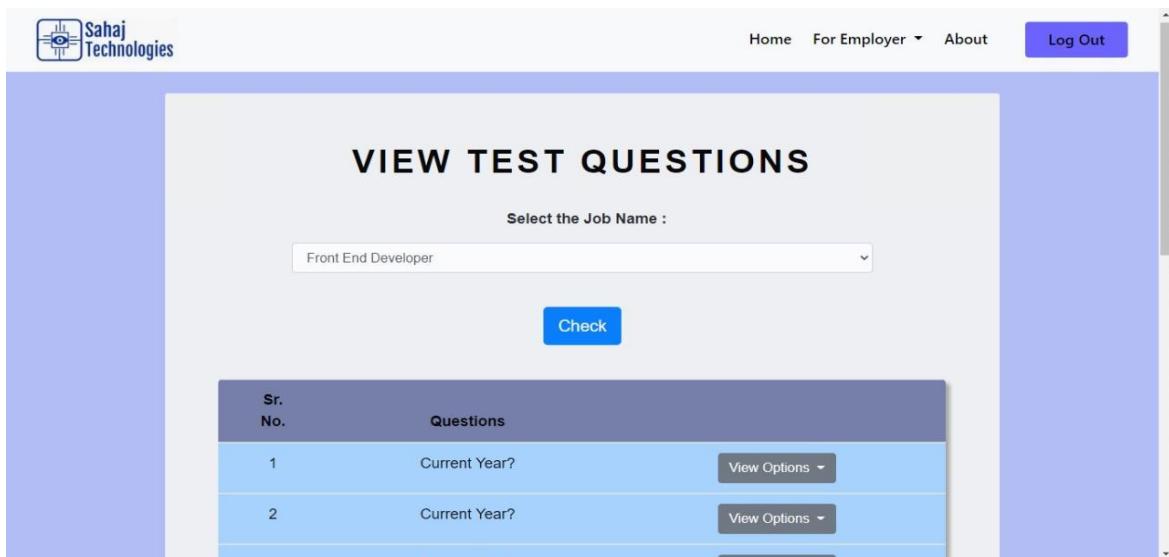


Figure 5.31 Show Details

Description: Figure 5.31 shows the show details page where Admin can view questions for test, view shortlisted candidates, view jobseeker's profile, and view posted jobs.

**Figure 5.32 View Test Questions**

Description: Figure 5.32 shows the page ‘view test questions’ page where Admin can view test related questions of any job selected.

Candidate Name	Profession	Email Address	
Devershi Dalwadi	Graphics Designer	devershi30@gmail.com	<i>i</i>
Dhruv shah	backend develop	dhruvshah232002@gmail.com	<i>i</i>
Ghanshyam oza	Frontend developer	ghanshyam.m.oza@gmail.com	<i>i</i>
Yash upadhyay	Graphics designer	kartikey.yash27@gmail.com	<i>i</i>

Figure 5.33 View Candidates

Description: Figure 5.33 shows the ‘view candidates’ page where this page shows how many candidates are there and by clicking on the ‘i’ (Information) button, Admin can view candidates information.

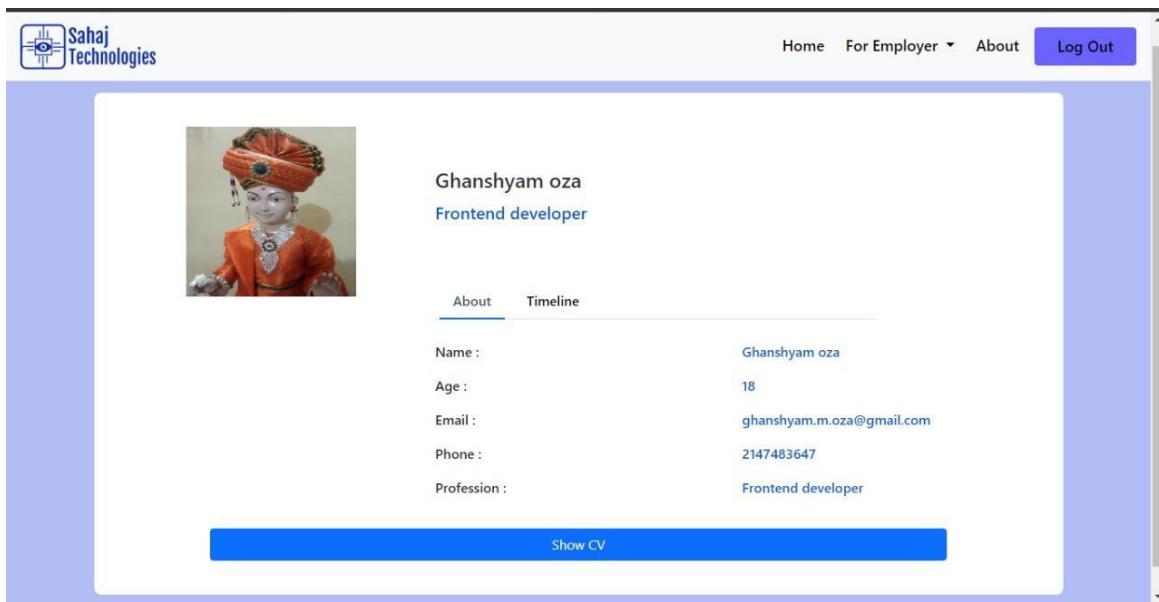


Figure 5.34 View Profile

Description: Figure 5.34 shows the ‘view profile’ page where it shows the complete information of the candidate such as personal info, timeline, skills, etc.

The screenshot displays a jobseeker's CV. On the left, there's a circular profile picture of the same individual shown in Figure 5.34. To the right of the picture, the name 'Ghanshyam oza' and title 'Frontend developer' are displayed. The CV is structured into several sections with colored headers:

- CONTACT** (Yellow header): Includes email (ghanshyam.m.oza@gmail.com), phone number (2147483647), address (49/50 Vaikunth society, near shreeji bunglows, Vadodara, India, 390012), and a download icon.
- Objective** (Yellow header): The text 'I AM THE WEB DEVELOPER' is present.
- Work Experience** (Yellow header): Includes 'Years of Experience : ' and 'Company names : '.

Figure 5.35 CV of Jobseeker

Description: Figure 5.35 shows the CV of Jobseeker which can also be viewed by the Admin. This CV can also be downloaded by clicking on the download button at the bottom of the page.

Job ID	Job Name	Job Type	Job Designation	
1	Front End Developer	Full time	CEO	
3	Digital Marketing Manager	Full Time	Manager	
4	Full Stack Developer	Full Time	Manager	
5	Photo-Video Editor	Full Time	Manager	
8	Electronics And Communication Engineer	Full Time	Manager	

Figure 5.36 Jobs Whose Test is given by Jobseeker

Description: Figure 5.36 shows the jobs whose tests were given by the Jobseeker. The i-button shows the information of the shortlisted candidates.

First Name	Last Name	Email	Aptitude Marks	CV Analysis Marks
Ghanshyam	Oza	ghanshyam.m.oza@gmail.com	10	8
Yash	Upadhyay	kartikeyyash27@gmail.com	10	6
Devershi	Dalwadi	devershi30@gmail.com	10	3
Dhruv	Shah	dhruvshah232002@gmail.com	10	1

Figure 5.37 View Shortlisted Candidates

Description: Figure 5.37 shows the shortlisted candidates page which shows candidates who had fulfilled all the possibilities and tests provided by the Admin for job.

The screenshot shows a web application interface for job posting. At the top, there is a header with the Sahaj Technologies logo, navigation links for Home, For Employer, About, and Log Out, and a search bar. Below the header, a section titled "11 Jobs" displays a table of posted jobs. The columns in the table are Job ID, Job Name, Job Type, and Job Designation. Each job entry includes a blue information icon (with a white 'i') to its right. The listed jobs are:

Job ID	Job Name	Job Type	Job Designation
1	Front End Developer	Full time	CEO
3	Digital Marketing Manager	Full Time	Manager
4	Full Stack Developer	Full Time	Manager
5	Photo-Video Editor	Full Time	Manager
8	Electronics And Communication Engineer	Full Time	Manager

Figure 5.38 View Posted Jobs

Description: Figure 5.38 shows the posted jobs which were made available to Jobseeker by Admin.

The screenshot shows a detailed view of a job listing for a "Front End Developer". The top part of the page features the Sahaj Technologies logo, navigation links for Home, For Candidates, About, and Logout, and a search bar. The main content area displays the job summary for a "Front End Developer" position at "Sahaj Technologies". The summary includes:

- Job Type: Degree
- Experience: 5 Year
- Skills: HTMLCSS,JS
- Salary: ₹ 10,000\$

An "Apply Now" button is located below the summary. Below the summary, there is a section titled "For a client of Sahaj Technologies - Job Details" containing the "Job Summary" with the following bullet points:

- Job Type : Full time
- Job Role : CEO
- Job Category : Front End Developer
- Hiring Process : Face to Face Interview
- Who Can Apply : Experienced (5 Year)

Figure 5.39 Job Information

Description: Figure 5.39 shows the information of job selected by Jobseeker in which Jobseeker can view its whole summary. In that, job type, job role, category, hiring process, who-can-apply, etc. can be viewed. At the bottom of the page, there is a button called “Give Test” which will redirect to test section.

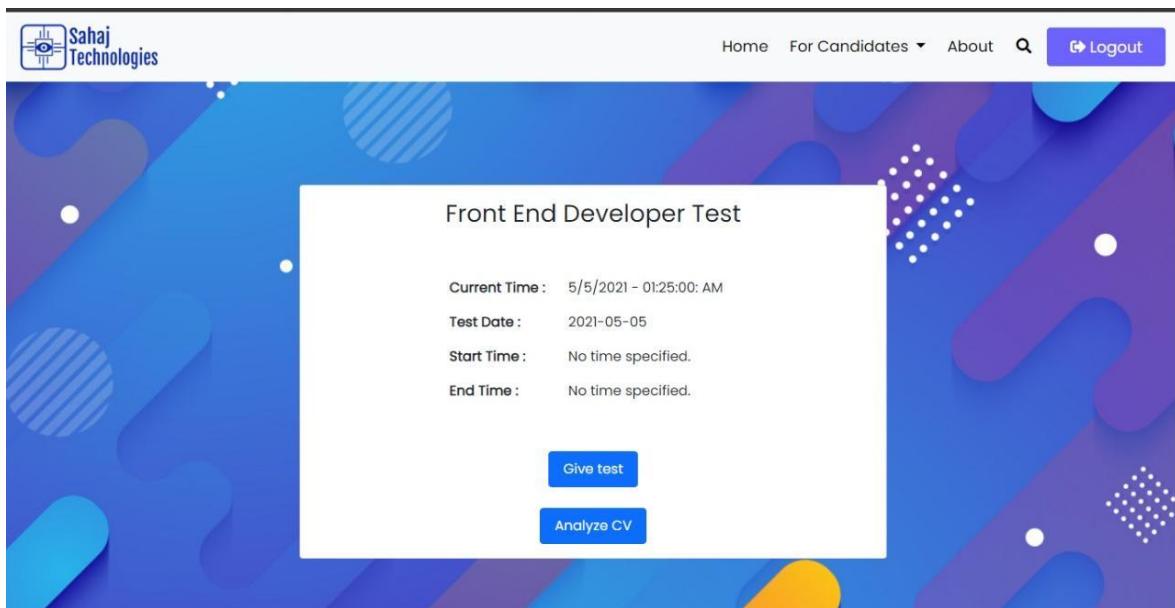


Figure 5.40 Start Test Page

Description: Figure 5.40 shows the start test page where the job seeker is redirected to welcome page for test on clicking the button “Give Test” and analyze their CV by clicking the “Analyze CV” button.

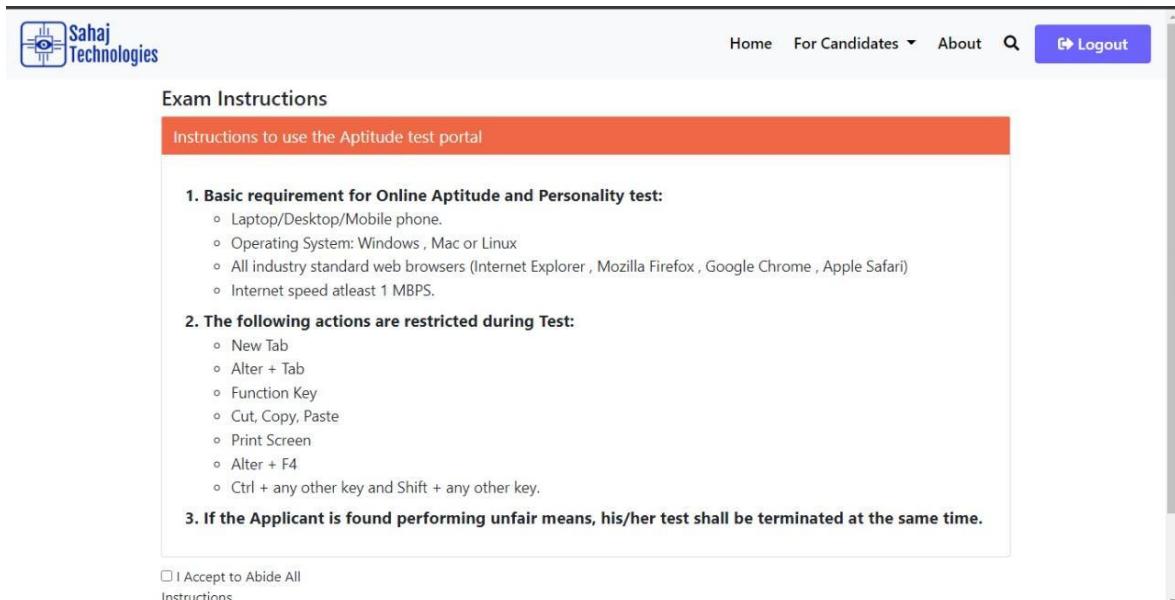


Figure 5.41 Exam Instructions

Description: Figure 5.41 shows the instructions page related to exam, requirements for online tests such as aptitude tests and personality tests, restrictions during tests, etc.

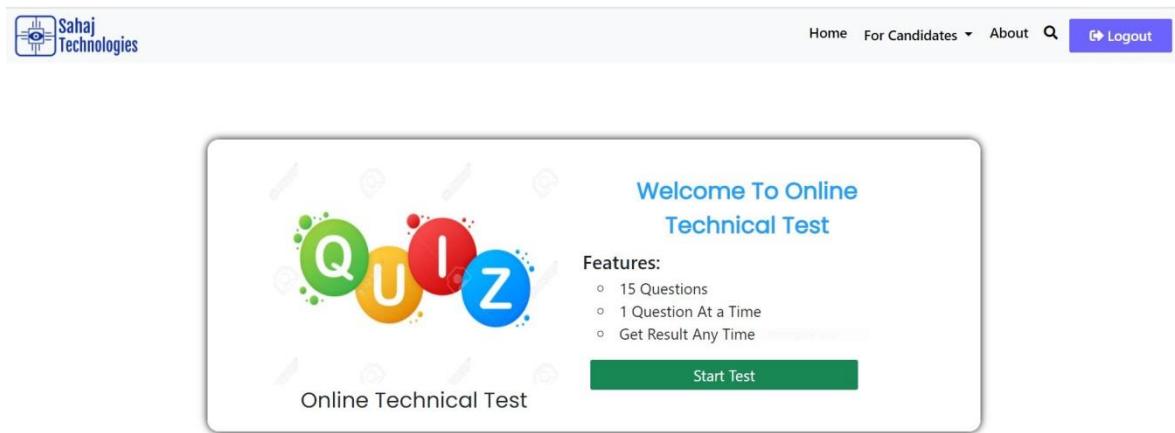


Figure 5.42 Welcome Page

Description: Figure 5.42 shows the page where the control is redirected to exam questions which will be taken in MCQs on click on the button “Start Test”. This is the welcome page which will be shown only if the time has begun for test.

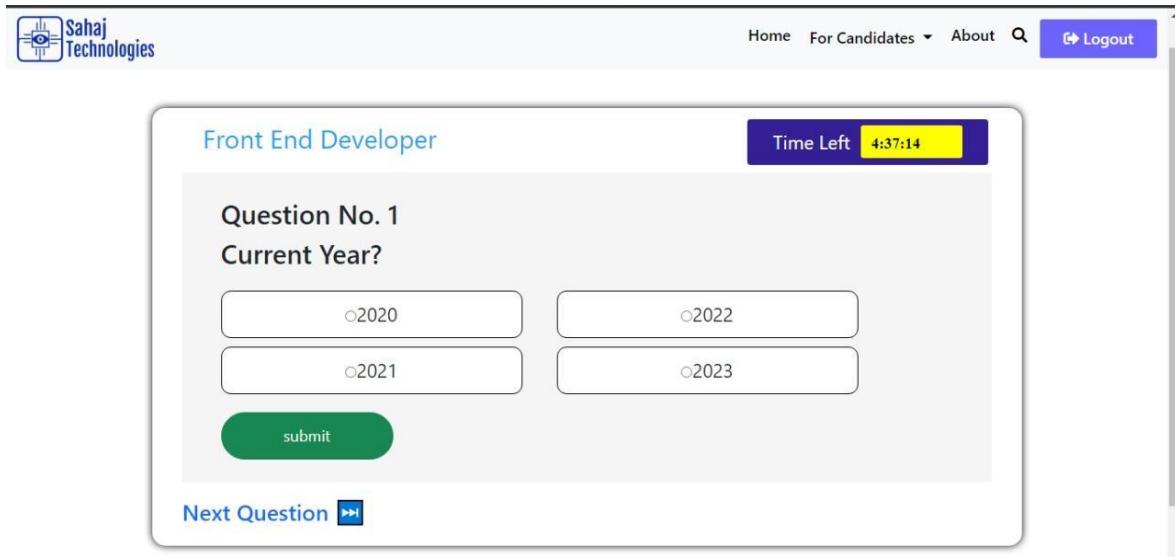


Figure 5.43 Exam Section

Description: Figure 5.43 shows the section where Jobseeker is given a number of questions to return the correct answer. After selecting the correct option, the answer is submitted by clicking “Submit” button and then by clicking the “Next Question” the second question is shown, and likewise. Only one question is shown at a time.

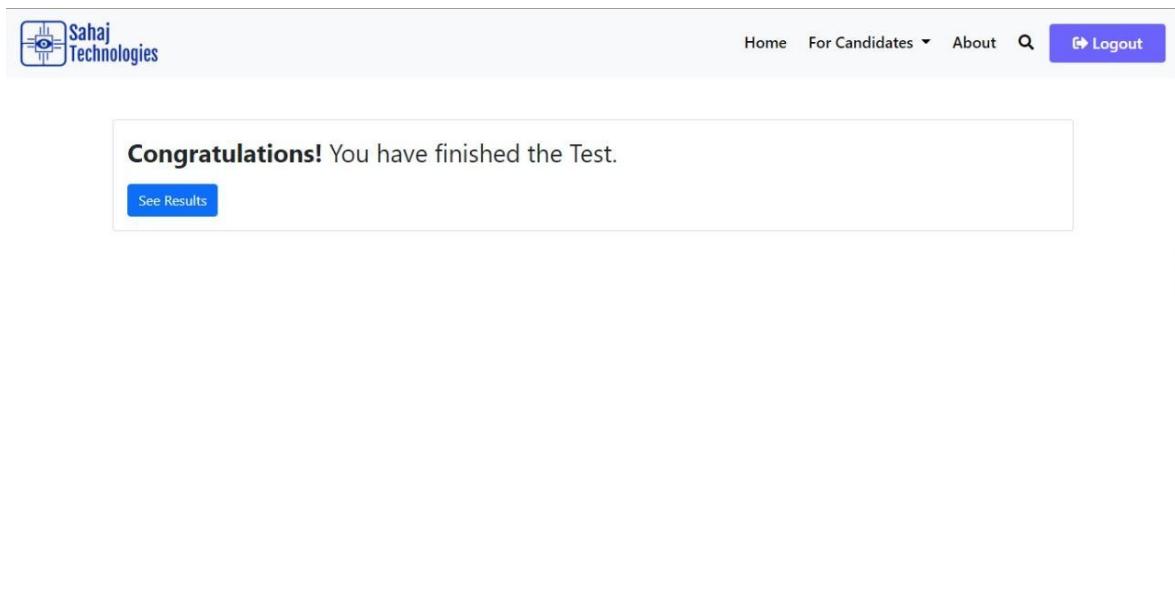


Figure 5.44 End of Exam Page

Description: Figure 5.44 shows the last page of congratulations. It is displayed after attempting the last question. By clicking the “See Results” button, result of test is displayed immediately.

The screenshot shows a web page titled "Your Result". At the top, there is a navigation bar with links for Home, For Candidates, About, a search icon, and Logout. Below the title, it displays the user's name "NAME :- Yash Upadhyay" and email "EMAIL :- kartikey.yash27@gmail.com". A table below shows the results of five questions, with the last one being unanswered.

Questions	Your Answer	Correct / Incorrect	Correct Answer
Current Year?	2021	✓	2021
Current Year?	2021	✓	2021
Current Year?	2021	✓	2021
Current Year?	2021	✓	2021
Current Year?	2021	✗	2021

Figure 5.45 Result Page

Description: Figure 5.45 shows the result page of Jobseeker. This page is generated immediately after the test is performed and on click of “Show Result” button on the “Congratulations” page.

Chapter – 6

Testing

CHAPTER 6: TESTING

6.1 Test Planning :-

The test plan is a base of software testing. It is a detailed document, which includes several testing attributes such as test objectives, scope, test schedule, template, required resources (human resources, software, and hardware), test estimation and test deliverables, risk, mitigation plan, defect tracking, entry and exit criteria, test environment, etc., which defines software testing areas and activities. The test plans play a major role in testing and help us deliver a quality project.

6.2 Test Strategy :-

The main parameters we have provided for system testing are:

- 1) Sign Up Validation
- 2) Email Address Verification Validation
- 3) Login Validation
- 4) Recover Your Account Validation
- 5) Contact Information Validation
- 6) Change Password Validation

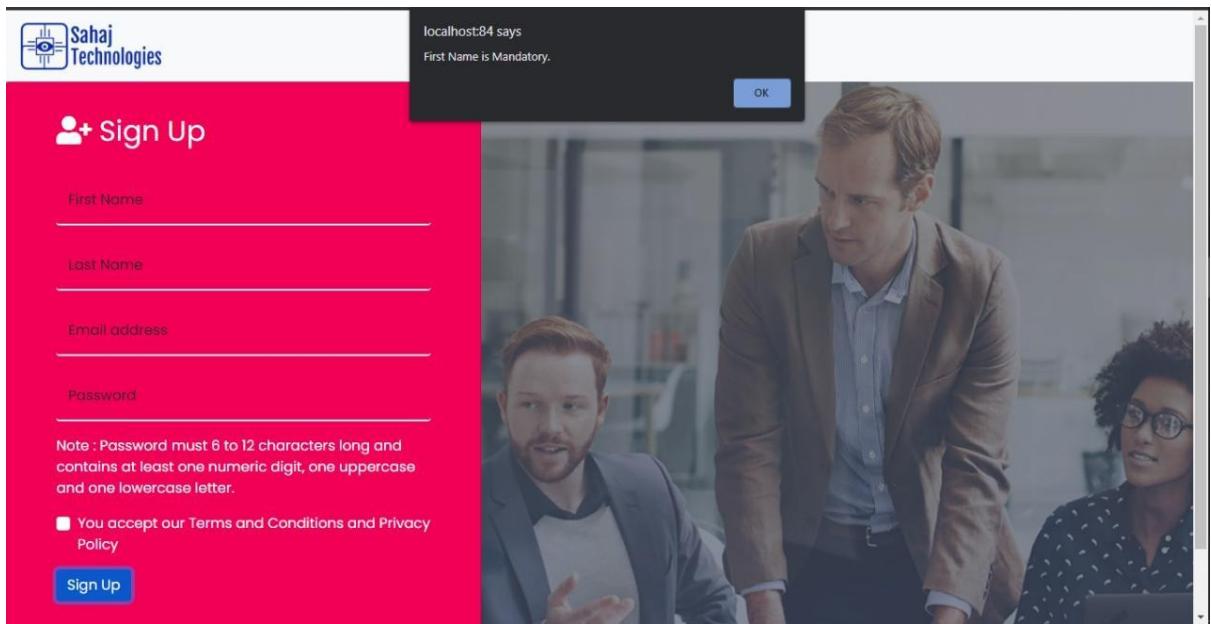


Figure 6.1 Sign Up Validation

Description: Figure 6.1 shows the signup page for the user to create profile, while creating profile he has to fill up the required mandatory details, here in this figure it shows that he has left the first name field empty so here an alert will appear with warning that “First Name is Mandatory.”.

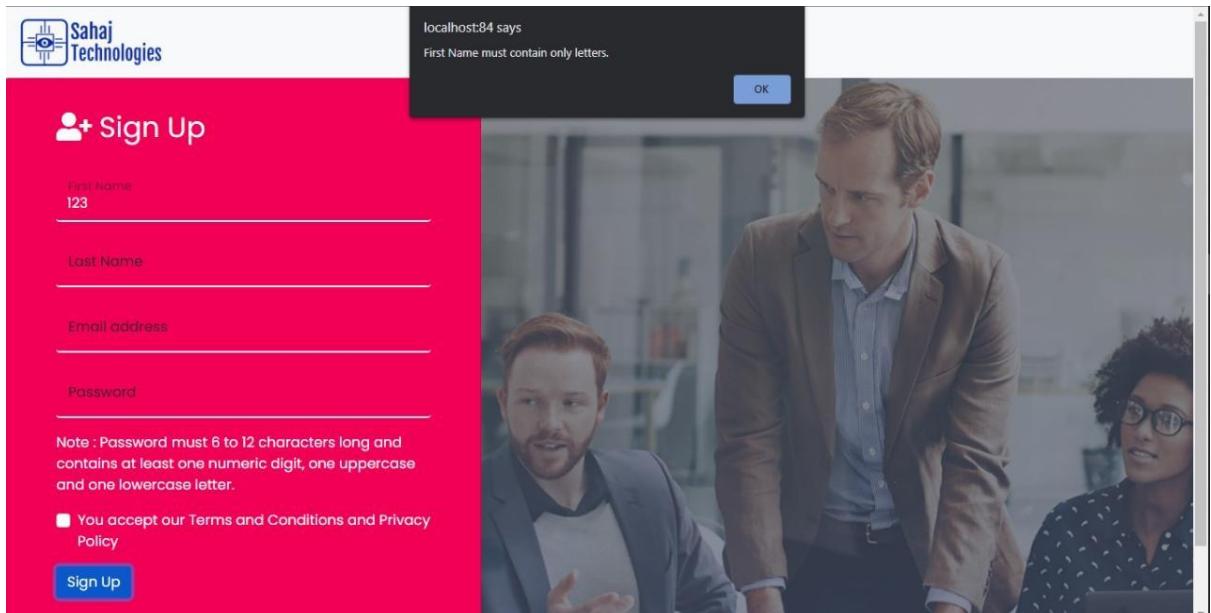


Figure 6.2 Sign Up Validation Scenario 1

Description: Figure 6.2 shows while signing up and while filling “First Name” field if he enters numbers or any special symbol then he will be warned through alert box warning “First Name must contain only letters.”.

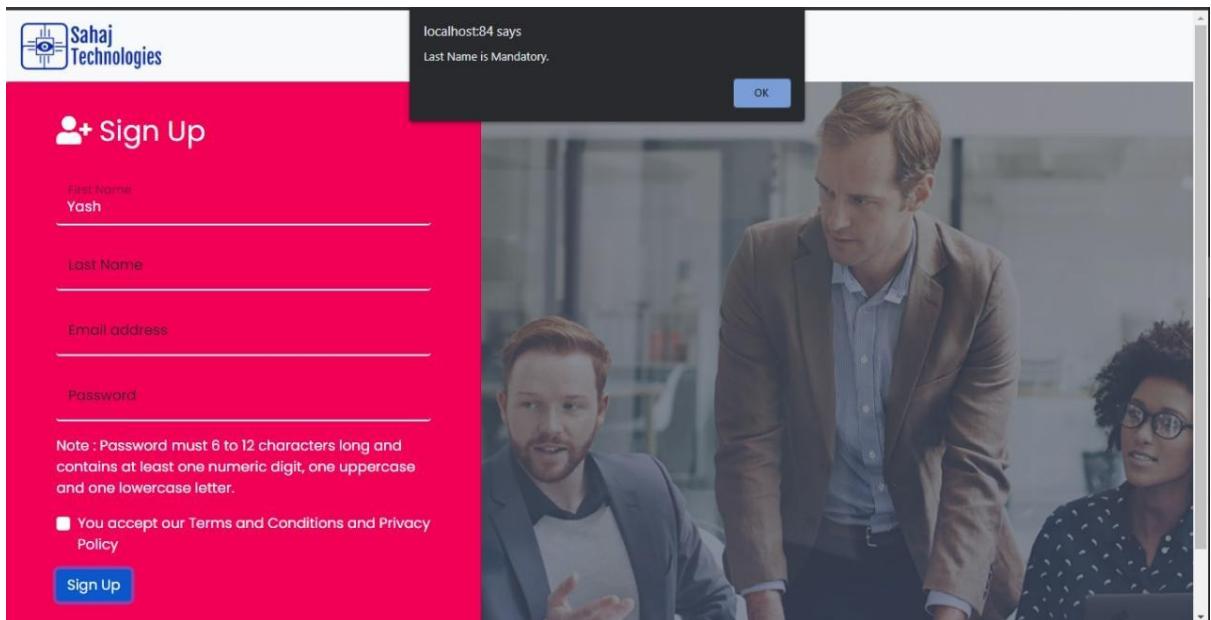


Figure 6.3 Sign Up Validation Scenario 2

Description: Figure 6.3 shows that while signing up and while filling “Last Name” field if he does not enter his last name or leave the field empty then he will be warned through alert box warning “Last Name is Mandatory.”.

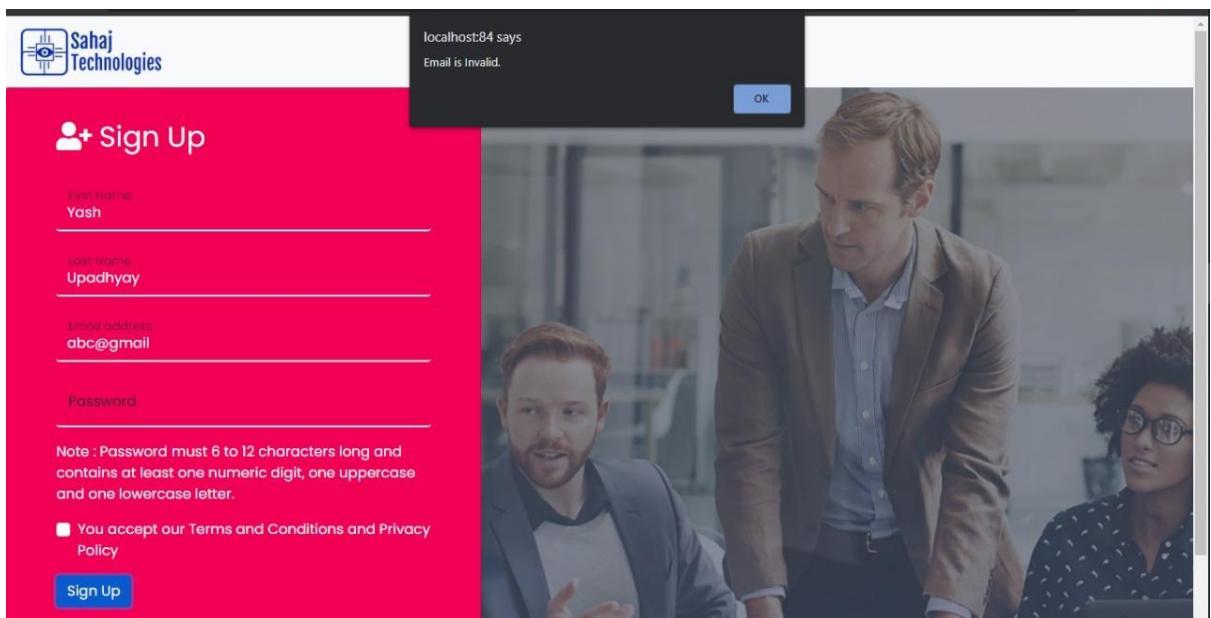


Figure 6.4 Sign Up Validation Scenario 3

Description: Figure 6.4 shows that while signing up and while filling “Email address” field if jobseeker does not enter his email address in correct format then he will be warned through alert box warning “Email is Invalid.”.

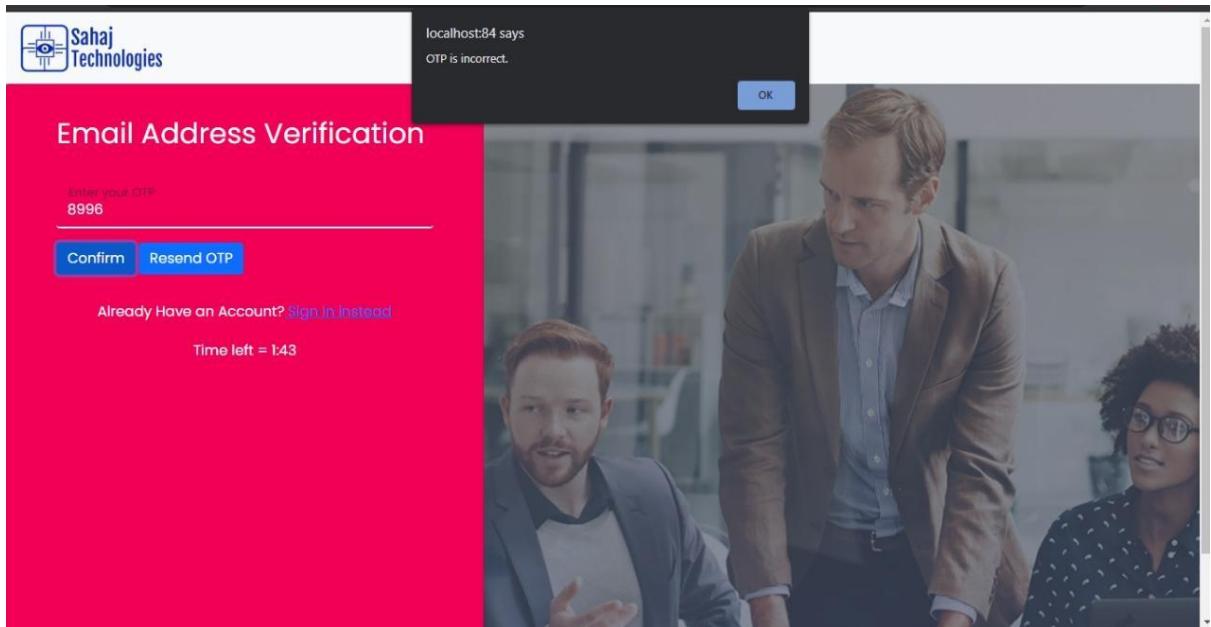


Figure 6.5 Email Verification Validation

Description: Figure 6.5 shows that while creating profile and while after filling the mandatory fields jobseeker will be redirected to the page where he has to enter a valid OTP sent from company then after he has to click on “confirm”. If the entered OTP does not match with the one sent by the company then he will be warned through alert box warning “OTP is incorrect.” And also the OTP will be valid only for 2 minutes i.e., he has to enter OTP within time left, after 2 minutes if he enters OTP then it will be incorrect and he can also request new one by clicking on “Resend OTP”.

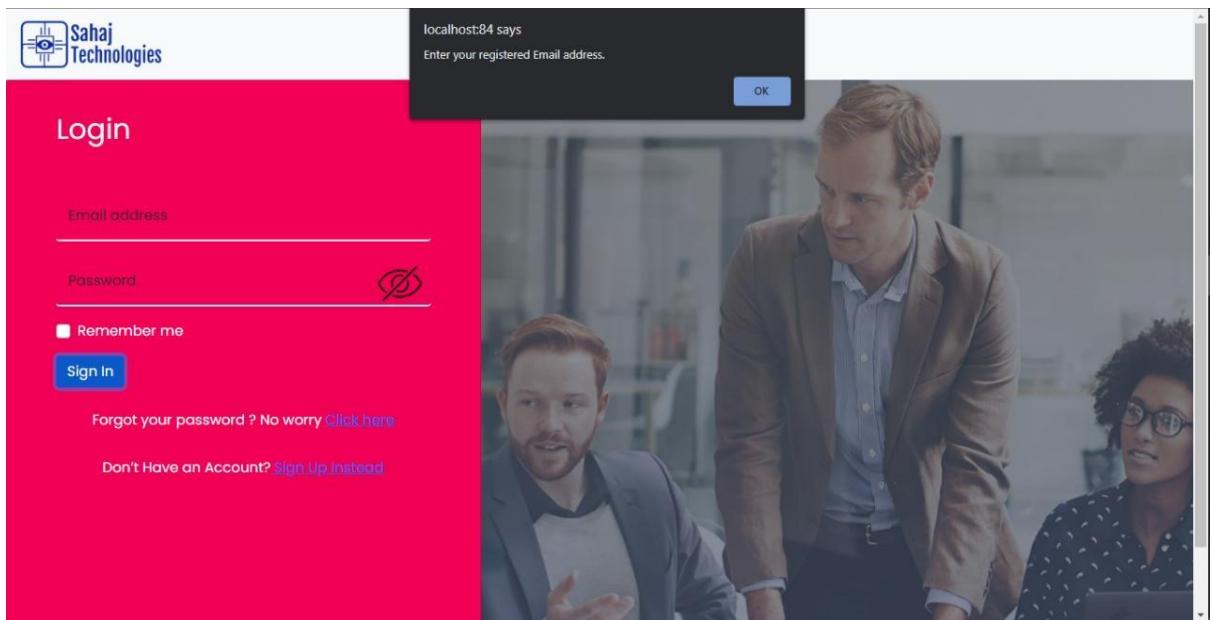


Figure 6.6 Login Validation

Description: Figure 6.6 shows the login page where job seeker has to enter his registered email address if he will leave the “Email Address” field empty then he will be warned through an alert box warning “Enter Your registered Email address.”.

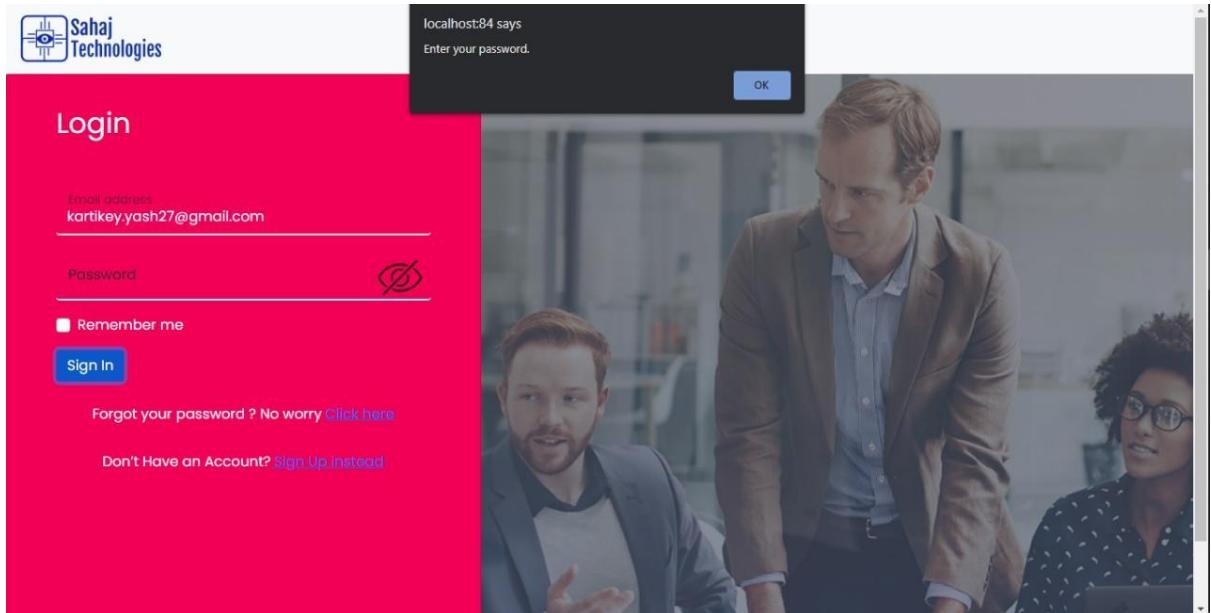


Figure 6.6 Login Validation Scenario

Description: Figure 6.6 shows that while signing in the job seeker after entering his registered email address, if he leaves the “Password” field empty then he will be warned through an alert box warning “Enter Your password”.

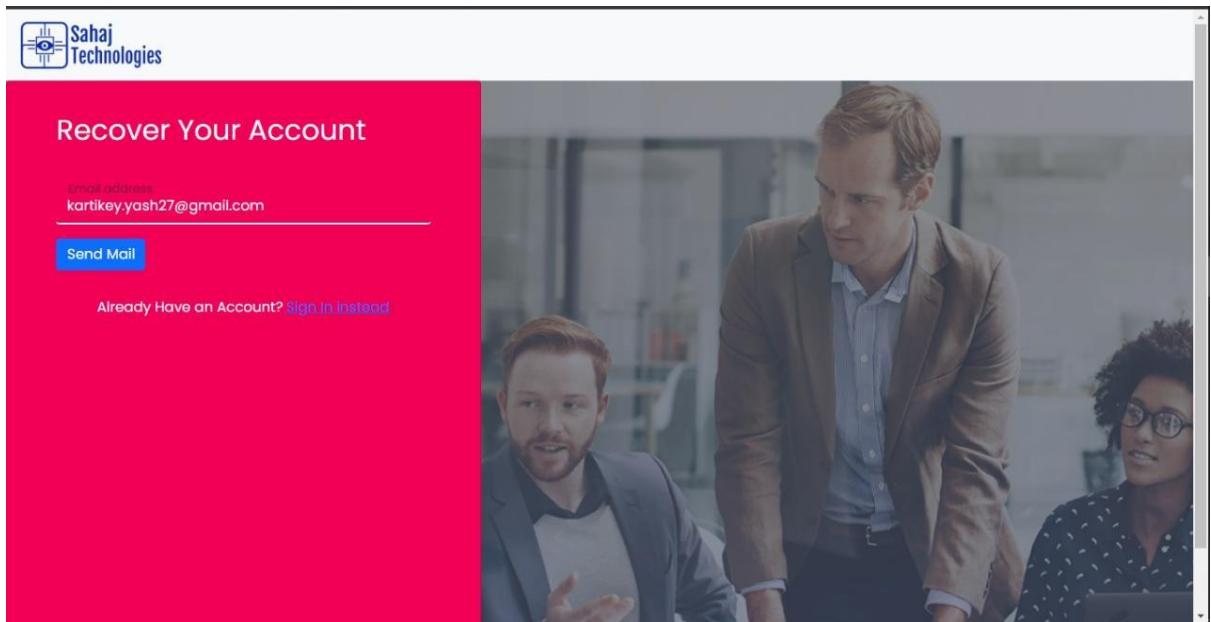


Figure 6.7 Recover Your Account Validation

Description: Figure 6.7 shows “Recover your account” page to which the job seeker will be redirected to after clicking “forgot password”, through which the job seeker will be sent a link via an email to his registered email address he entered during signing up, in this page he has to enter his registered email address. In the link sent through email, he will be asked to enter new password and reenter the new password again. If the email address he entered doesn’t match with the email address he entered while signing up, then the link will not be sent.

The screenshot shows a web application interface for 'Sahaj Technologies'. At the top right, there are links for 'For Candidates', 'About', and 'Logout'. A central alert box displays the message 'localhost:84 says Phone Number is Invalid.' with an 'OK' button. Below the alert, the page title 'Contact Information' is visible. The form contains fields for Phone number (123456789), Email Address (kartikey.yash27@gmail.com), Country (India), Postcode (390018), City (vadodara), and Address (Pratham Rivera). A blue 'Save' button is at the bottom.

Figure 6.8 Contact Information Validation

Description: Figure 6.8 shows the contact information section of job seeker, the figure here shows that if job seeker enters his phone number which is less than 10 digits or has any alphanumeric characters then he will be warned via an alert box warning “Phone number is Invalid.”.

This screenshot is identical to Figure 6.8, showing the same contact information form. The alert box now displays the message 'localhost:84 says Email is Invalid.' with an 'OK' button. All other elements, including the form fields and the 'Save' button, are the same as in Figure 6.8.

Figure 6.9 Contact Information Scenario 1

Description: Figure 6.9 shows that if job seeker does not enter the email address in a proper format i.e., here user has not written whole email address without “.com”, so job seeker will be warned for this via alert box warning “Email is Invalid.”.

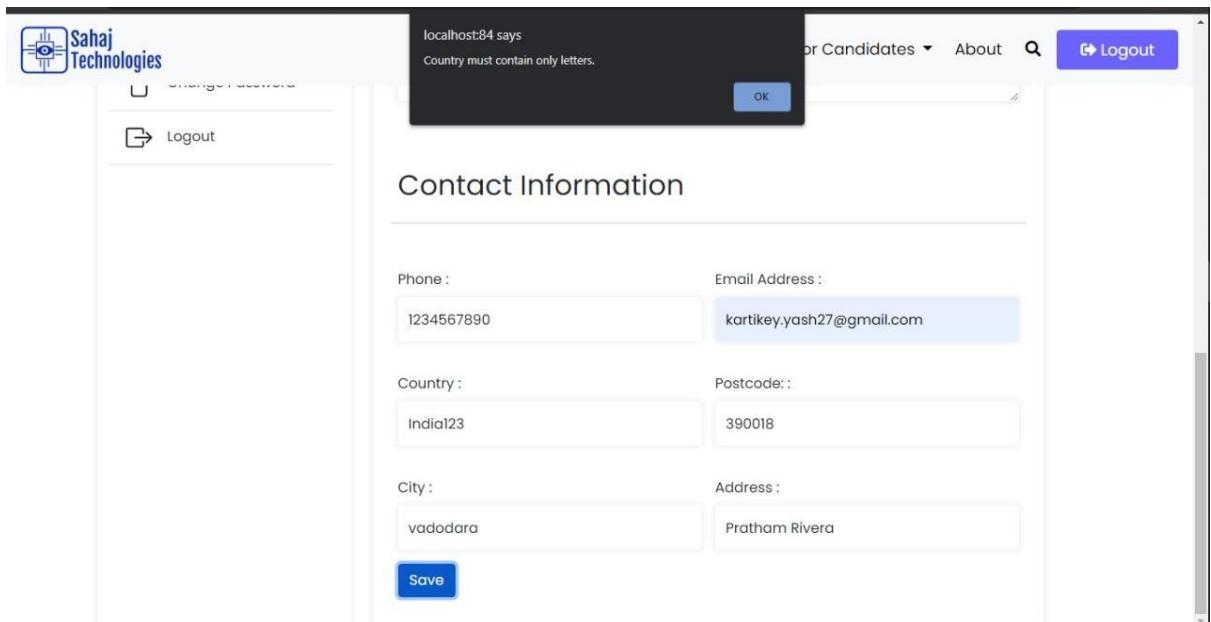


Figure 6.10 Contact Information Scenario 2

Description: Figure 6.10 shows that if job seeker will not enter the name of country in a suitable format then i.e., here user has included “India123” instead of “India” so he will be warned for this giving warning “Country must only contain letters.”.

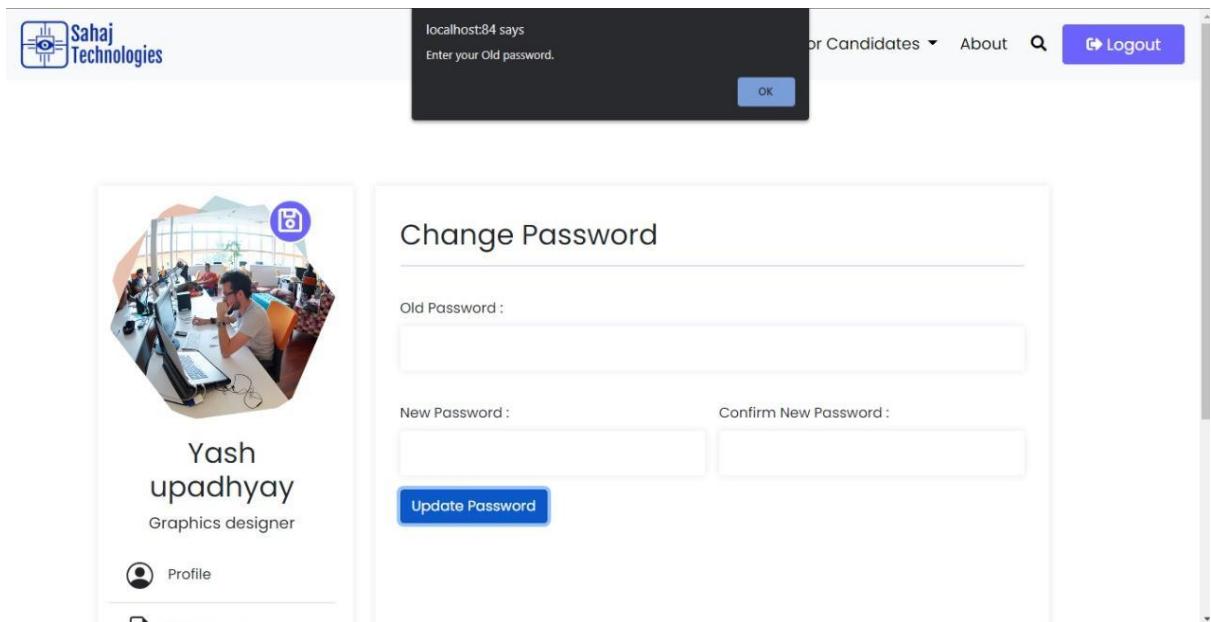


Figure 6.11 Change Password Validation

Description: Figure 6.11 shows that if job seeker wants to change his old password and if he doesn't enter the password that he wants to change ,i.e if he leaves “old password” field empty then he will be warned “Enter your Old password.”.

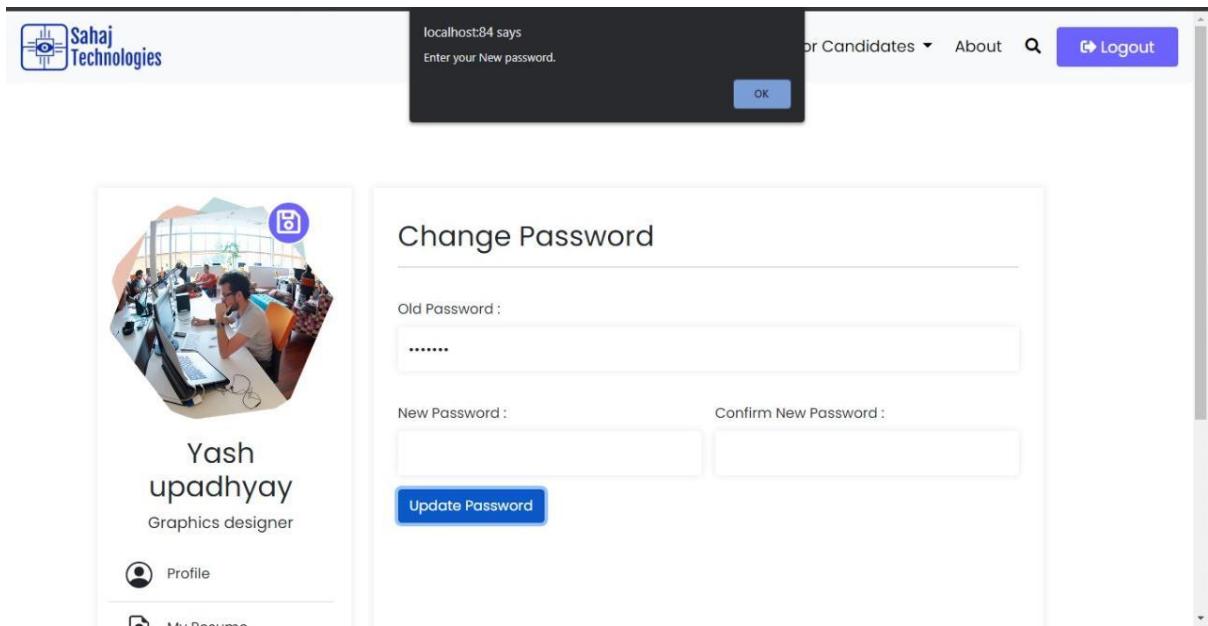


Figure 6.12 Change Password Validation Scenario 1

Description: Figure 6.12 shows that if job seeker enters his old password but does not entered the new password he like to set, i.e, he leaves empty the “New Password field” then he will be warned that “Enter your New password.”.

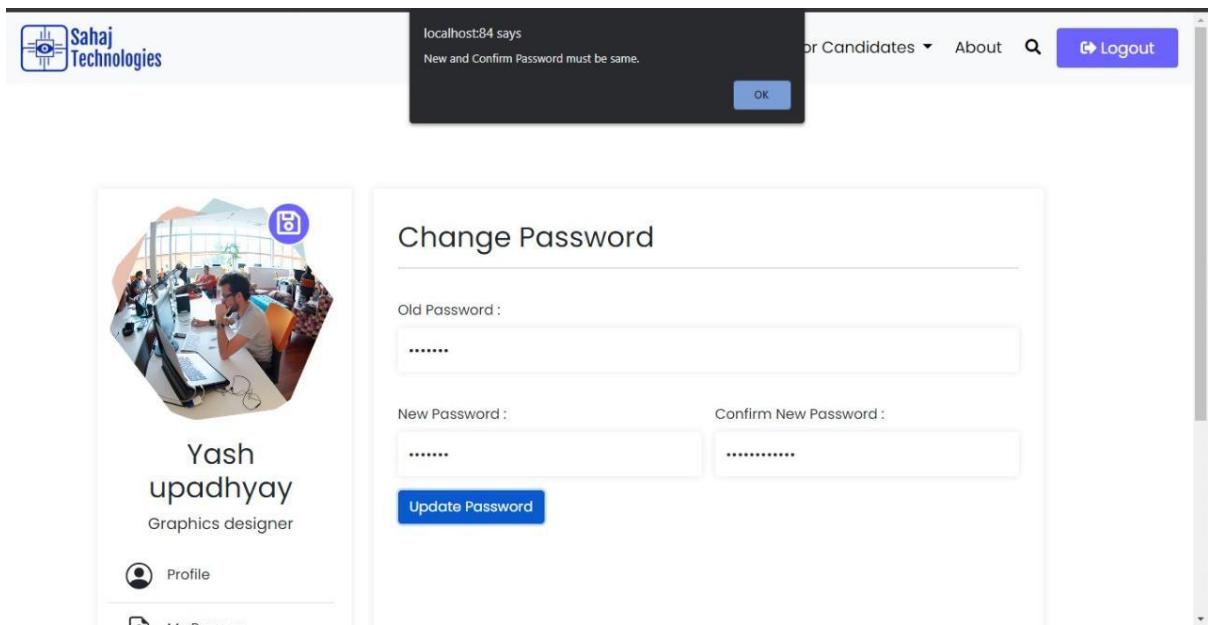


Figure 6.13 Change Password Validation Scenario 2

Description: Figure 6.13 shows that if job seeker entered different data in “New Password” field and different data in “Confirm New Password” field i.e., his entered data in both the “New password” and “Confirm new password” doesn’t match then he will be warned that “New and confirm Password must be same”.

Chapter – 7

Conclusion And Future Work

CHAPTER 7: CONCLUSION AND FUTURE WORK

7.1 Conclusion :-

E-recruitment is one of the major advancements of the job industry today. Overcoming traditional methods of recruitment, e -recruitment has bought a revolutionary change in the world of interviews and recruitment. While this website aims in giving a user-friendly experience to the users with a simple but logical frontend it has achieved so at its completion and give a easy tool for job enrollment to the company. This website also achieves certain functional capabilities with the latest technology stack used in the industries today. The testing results shows that the website is scalable and can handle decent load in future. Also, this website does not have any geographical constraints. Developing this project with a primary goal of learning new technologies, we have got immense exposure in understanding technologies like PHP (which is used by 80% of websites) not only at the implementation level but also in understanding the background of such technologies. Similarly, we have also learnt MySql database. Some of the major challenges faced was in understanding the fetching and retrieving the data and the linking of the different databases to another and implementing them in the website. This invariably have enhanced our knowledge with a new technologies which would come handy once we start facing the job market after our graduation.

7.2 Future Work :-

There is a huge scope of enhancement of this website and in future, we can add new features in this system. This website can be extended to send automated interview scheduling through acceptance and rejection of Job seeker's Resume. The website can have a job recommendation system based on the frequent search results of different users (like facebook.com). The website can also send email notifications to jobseeker about certain job availabilities.

The website can also send email notifications and alert to jobseeker if new job is posted on website. There can be a feedback or review section for the website. Also unlike the current job description page, job seeker can view job description in a separate page with one click on the job description. Moreover, Job seeker can upload multiple documents on their profiles. The website can be more scalable by extending the search functionality based on country, city or area. While this website meets the basic requirements of a job enrollment

website eliminating few of the traditional challenges faced like time, money and effort, it can be extended to make the website more dynamic and robust. The User Interface can be made more attractive and user friendly.

Chapter – 8

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