

**JOBSKILLBD.COM ONLINE JOB PORTAL APPLICATION**

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**Dhaka, Bangladesh**

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## **APPROVAL**

This Project titled “**Jobskillbd.com**”, submitted by Md. Zubayer Islam. Id:151-15-5047, Md. Asif Rahman. Id: 151-15-5090 and Mst. Shapla Akter Id: 151-15-5211 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 Electronics and Telecommunication Engineering and approved as to its style and contents. The presentation has been held on 11/12/2018.

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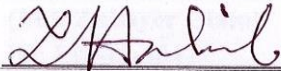
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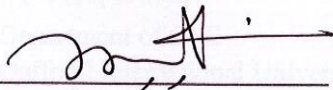
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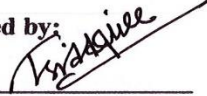
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mr. Shah Md Tanvir Siddiquee, Senior Lecturer**, Department of Computer Science and Engineering Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

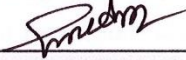
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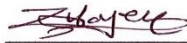
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Finally, I must acknowledge with due respect the constant support and patients of my parents.

## **ABSTRACT**

This project is on “Jobskillbd.com”. This is an web based Online Job portal application, which will help the job seeker to find job and apply job. Also help to create strong cv and cover letter and help to take job preparation. On the other hand Employer can post job circular and filtering cv using specific keyword from huge amount of cv and select job seeker. The aim of the web Application is to build a better application to provide online job portal system. Job seeker can create cv and download different types of CV and Cover for different types of job. And jobseeker can able to upload their resume and video resume in the system. After creating cv job seeker can able to apply job. Job seeker can get recommendation and notification for matched job. Job seeker can search job using specific keyword and job type. Both type of user can follow and unfollow each other. In this system admin can manage database and perform specific action. To develop this project the most essential devices are computer and smart phone to test the application. Need computer and xampp server for localhost. On the other hand we needed sublime text editor for web application coding. With this web application Job seekers and employers will get benefits and it will easy to job finding and job recruitment process. Employer can post job circular easily and job seeker will find and apply job without trouble. This is the main purpose of our project. So, I think it will help all the job seekers and employer. They will done a lots of thing by this web application. After implementation of all features, the system is tested in different devises and it works successfully as a prototype.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

This is a web based application. This application is designed by web engineering technique. Actually this is a job portal for people seeking jobs and the employers who need great people in Bangladesh. Our aim is to help the people find jobs in different sector. Basically this application is a career management site that is the best way for people find jobs and apply, and companies recruit top talent. By this application job seekers connect directly with employers and this help the job seekers manage their career more efficiently. This site will also help employers to solve problems that combined with traditional recruiting methods and allow them to save time and money. This job portal help to create cv and cover letter for new job seeker and also provide different type of cv for different type of jobs. This is internet based site and dynamic site and this site is able to attract to the internet users. In this site job information will updates regularly. It provides facility for posting job to the employers and posting resume to the job seekers and online application. The site is able to get good response from many organizations who use online job advertisement facility, online CV bank access and online application receiving and processing facility of this application. This application also detect vulgar post on the site.

### 1.2 Motivation

This world is changing every time. And we have to walk with this running world proportionally. That's why we need digitalization in every sector and for this we need internet based application. In current situation of our country job sector also depend on the internet, so we need internet based application that helps on the job sector. Our country has some kind of internet based job portal in which user can get information about job, can give job post and so on. But it is limited and not enough good qualified. In our country, there is a lack of good quality job portal. By that site job seeker do not get the right advice for what they want to emphasize in their preferred career. On the other

hand employers (company) are face many difficulties to choose CV among the large amount of CV. Sometimes it is seen that some people make vulgar post in different site for creating embarrassing situation. For this different problem we are motivated to create this type of application.

### **1.3 Objectives**

In this present market there are exist a lots of job portal application. They have a lots of good contents. But the main problem is that other site do not provide cover letter and CV template for job seekers and do not also provide for employers to find out worthy CV from huge amount of CV. Our web-application aims to explore maximum benefits of the Internet to create strong CV, different type of CV templates, post job circular, apply job easily, suggests matched job to job seekers and detect vulgar word. With those feature we are going to make this web based application.

### **1.4 Expected Outcome**

Expected outcome is making a wed based platform which will help all the users who are wanted to get job and give job. They can easily to do complete their work with more interest by using this application. This application will provide for job seekers to find job circular and apply job easily and also provide different type of CV templates, strong CV and suggest matched jobs to the job seekers. It will also provide for company to post job circular, to find out worthy CV from huge amount of CV. This application will also detect vulgarism. This features will help the user on the job sector with pleasure.

## 1.5 Report Layout

**In chapter 1:** It has given something about this application. In this chapter motivation is also given. Why job seeker and employer should use this application. Then some objective is given here. And then expected outcome also given here.

**In chapter 2:** It will provide background about this kind of application. Related works about this application. What I have studied about this application. That will also give in this chapter. Scope of this problem and challenges will provide in this application.

**In chapter 3:** Firstly this chapter will provide information about business process model that means (BPM). Then it will provide requirement collection and analysis. The total result about the requirement and the analysis. After that use case model and logical data model will provide. Then requirement is given.

**In chapter 4:** In this chapter all the design process are here like font-end design, back-end design, interaction design and UX and the last thing of this chapter in implementation requirement.

**In chapter 5:** This chapter discussed about the implementation of database, front-end designs, implementation and interactions, testing implementation and the test results of the project.

**In chapter 6:** I have discussed about the conclusion of my application, limitation and the scope for further developments of my project

## **CHAPTER 2**

### **BACKGROUND**

#### **2.1 Introduction**

The first web browser, World Wide Web, was developed in 1990 by Tim Berners-Lee for the NeXT Computer (at the same time as the first web server for the same machine) and introduced to his colleagues at CERN in March 1991 [1].

Bdjobs.com Ltd. is the first and leading career management site in our country. They started this venture on July 2000 [2]. A web-based application is any program that is accessed over a network connection using HTTP, rather than existing within a device's memory. Web-based applications often run inside a web browser. Web-based applications are also known as web apps [3]. From that time people are using this feature in every platform. Now a day some other people using web application for creating job portal and other e-commerce and e-business.

#### **2.2 Related Works**

There are a lots of platform who have been use web-based application. Bdjobs is a platform where web-based online job portal application already used. They provide job circular, provides facility to the job seekers for posting resume and online application. The site has also been able to get good response from a large number of organizations in the country who use online job advertisement facility, online CV bank access and online application receiving and processing facility [2]. Chakri.com, skilljobs.com is also this kind of application.

#### **2.3 Comparative Studies**

Bdjobs.com and chakri.com are online job portal. Where anyone can get easily find and apply job creating CV. They provide many type of facilities like by this site job seeker can find information any kind of job, they can upload CV for getting job purpose, employers can be able to post job circular, job seeker able to apply job. They provide one CV templet for download but our system can provide different types of cv templet for different type of job. They do not provide cover letter based on CV but our system

provide cover letter based on cv. Vulgar word detection mechanism are not present in their site but this system is available in our site.

## **2.4 Scope of the Problem**

Some web application provided real time chatting system to communicate with others user. But we cannot able to adding this feature. This is a problem. On the other hands if a lot of people use this application at the same time then it can be slow and that is another problem in this application. Besides we need to use some analytical algorithms to do better but we cannot. To make this application we had to learn about some other technology like AJAX and CURD.

## **2.5 Challenges**

To develop this application our first challenge was to learn web-based application development. Then we had to do more study about web development as if this application can fulfill user's expectation. AJAX, CRUD and validation operation was big challenge to us. Ajax (asynchronous JavaScript and XML) is a method for site loading that retrieves server data for specific elements without reloading the whole page. If your template uses Ajax loading, your site only loads the content that's visible, rather than all the content on the page at once [4]. CRUD for Create, Read, Update and Delete. We can do this operation by CRUD. We know that different job sector prefer different type of CV template so to design different type of CV template according to their demand. And provide cover letter based on cv this feature was very much challenging for us. The main challenge for us to promote our online job portal.

## CHAPTER 3

### REQUIREMENT SPECIFICATION

#### 3.1 Business Process Modeling

Job seeker, employer and admin these are the entities. Job seeker can find & apply for job and create CV in an online platform by using this web application. Employer can post job, searching CV and filtering cv by login his account. Admin can add any kind of user in this web application. If necessary, Admin also can update & delete user information. After login job seeker can apply for job and get notification for recommended job. User also update their profile information by login this system. After posting the job employer can filter cv and search cv using his required specification. This web application can using as a online Job portal. All the posting job and recommended job will show in the job seeker dashboard.

#### 3.2 Requirement Collection & Analysis

**Job Seeker:** Sometimes Job seeker faced some problem when he/she create cv and searching for job. This problem faced all types of job seekers. They can't understand which type of cv is need for which type of sector. And they can't find all jobs information. In this web application will help them to solve this kind of problem. All the job seeker can use same type of cv structure for all types of jobs. But it's a main mistake. Our web application is provided different types of cv templet and cover letter for different types of jobs. Every day many job circular are posted but job seeker can't know all job circular. But in our system can notified all recommended job. This is a great opportunity to them to solve the problem. That's why is web application is an appropriate platform for Job seekers.

**Employer:** Sometimes employer faced some problem when they want to post new job circular. Basically This problem mainly faced all types of company. But our system solve those problem, cause using our site employer can easily post job circular. Employer can faced another problem when they filter cv from huge amount of cv. This problem is solve using our web application because our web application provide cv filter option by



required specification. In This reason our system is very much helpful for any type of employers.

**Admin:** Admin faced problem generally when admin notice any unwanted things happen in a system. In this kind of problem admin need to permission to perform some specific action such as delete, update, maintenance database. In our system we provide those types of action for admin panel.

### 3.3 Use Case Modeling & Description

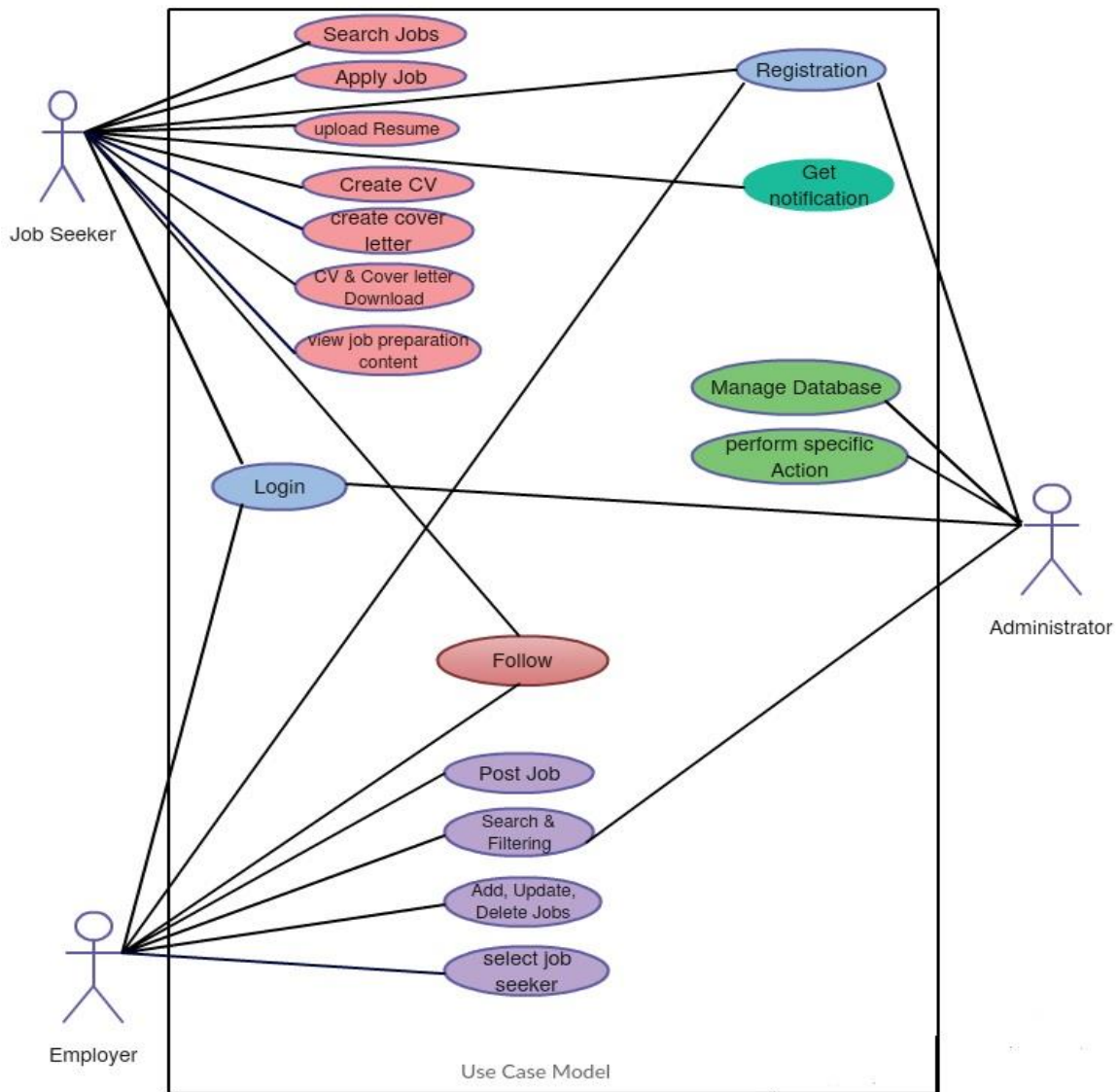


Figure 3.3.1: Use Case Model of The System

**Use Case Description:** In software and systems engineering, a **use case** is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system to achieve a goal. The actor can be a human or other external system [5]. In this application there is job seeker who can find and apply job, create cv. The system will provide a outcome on the basis of his activity [Figure 3.3.1].

Table 3.3.1: Use case description of search Job.

Use Case 01	Search Job
Primary Actor	Job Seeker
Secondary Actor	Null
Pre-Condition	A Job seeker need to internet connection and browsing our site for job search and click the search icon for searching job.
Main Success Scenario	Click the search icon with specific keyword and find job post.
Exception Scenario	No data found because of internet connection or keyword problem

Table 3.3.2: Use case description of Apply Job.

Use Case 02	Apply Job
Primary Actor	Job Seeker
Secondary Actor	Null
Pre-Condition	A Job seeker going to login to account apply for a job and click the apply icon for specific job.
Main Success Scenario	Click the apply icon for specific job and apply successfully.
Exception Scenario	Unsuccessful apply because of internet connection or uploading problem.

Table 3.3.3: Use case description of Upload Resume.

Use Case 03	Upload Resume
Primary Actor	Job Seeker
Secondary Actor	Null
Pre-Condition	Login in the system.
Main Success Scenario	Job seeker will store their resume in system and use it when employer want.
Exception Scenario	Unable to upload resume for internet problem or server problem.

Table 3.3.4: Use case description of CV Create.

Use Case 04	Create CV
Primary Actor	Job Seeker
Secondary Actor	Null
Pre-Condition	Login in the system and internet connection.
Main Success Scenario	Job Seeker can create standard and strong CV and able to apply job successfully.
Exception Scenario	server problem and submit problem for internet connection.

Table 3.3.5: Use case description of CV and Cover Letter Download.

Use Case 05	CV and Cover Letter Download
Primary Actor	Job Seeker
Secondary Actor	Null
Pre-Condition	Login in the system and needed 60 % completed CV
Main Success Scenario	Job Seeker will login in the portal with proper email and password then able to download different type of cv with cover letter.
Exception Scenario	Downloading error for internet connection or server problem

Table 3.3.6: Use case description of registration.

Use Case 06	Registration
Primary Actor	Jobseeker/Admin/Employer
Secondary Actor	Null
Pre-Condition	Must need email account and Internet connection.
Main Success Scenario	Job Seeker/ Admin/Supervisor will give their email and provided required information correctly to registration in the portal.
Exception Scenario	Email problem, Database problem, Internet problem, server problem.

Table 3.3.7: Use case description of login.

Use Case 07	Login
Primary Actor	Jobseeker/Admin/Employer
Secondary Actor	Null
Pre-Condition	Must need email account and Internet connection.
Main Success Scenario	Job Seeker/ Admin/Supervisor will give the email and password correctly to login in the portal.
Exception Scenario	Database problem, Internet problem, server problem.

Table 3.3.8: Use case description of follow.

Use Case 08	Follow
Primary Actor	Employer / Job Seeker
Secondary Actor	Null
Pre-Condition	Login in the system and internet connection.
Main Success Scenario	Employer/Job Seeker will give the email and password correctly to login in the portal, then they can follow job seeker and employer.
Exception Scenario	Internet problem, server problem.

Table 3.3.9: Use case description of post job.

Use Case 09	Post Job
Primary Actor	Employer.
Secondary Actor	Null
Pre-Condition	Login and internet Connection and complete company profile.
Main Success Scenario	Employer will give the email and password correctly to login in the portal, then able to post Job Circular.
Exception Scenario	Internet problem, server problem.

Table 3.3.10: Use case description of Search and Filtering.

Use Case 10	Search and Filtering
Primary Actor	Employer/Admin
Secondary Actor	Null
Pre-Condition	Login, Internet Connection and must post job circular.
Main Success Scenario	Employer/ Admin will give the email and password correctly to login in the portal, then able to CV search and CV filtering using specific keyword.
Exception Scenario	Internet Connection and database problem

Table 3.3.11: Use case description of Add/Update/Delete job.

Use Case 11	Add/Update/Delete job
Primary Actor	Employer
Secondary Actor	Null
Pre-Condition	Login, Internet Connection and must post job circular.
Main Success Scenario	Employer will give the email and password correctly to login in the portal, then able to add Job, update job post and delete job post successfully.
Exception Scenario	Internet Connection and server problem.

Table 3.3.12: Use case description of Perform Specific Action.

Use Case 12	Perform Specific Action
Primary Actor	Admin
Secondary Actor	Null
Pre-Condition	Login and Internet Connection.
Main Success Scenario	Admin will give the email and password correctly to login in the portal, then able to some specific action such as disable posted job, hide something etc. successfully.
Exception Scenario	Database problem

Table 3.3.13: Use case description of Manage database.

Use Case 13	Perform Specific Action
Primary Actor	Admin
Secondary Actor	Null
Pre-Condition	Need data base access.
Main Success Scenario	Admin will give the email and password correctly to login system panel, then able to manage database successfully.
Exception Scenario	Database and server problem.

Table 3.3.14: Use case description of Get notification.

Use Case 13	Get notification
Primary Actor	Job seeker/Employer.
Secondary Actor	System
Pre-Condition	Login in the system and need internet connection.
Main Success Scenario	Job Seeker/ Employer will give the email and password correctly to login in the portal and get notification for specific issue.
Exception Scenario	Unsuccessful apply because of internet connection or uploading problem.

### 3.4 Logical Data Model

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases [6]. Logical data model describes data those are stored in database as deep as possible. It includes all entities and relationship among them. Actually Logical data model presents the Entity Relationship Diagram called E-R diagram. In E-R diagram all attributes for each entity are specified. The primary key, foreign key and other attributes are specified in the diagram. In figure below we have shown the ER diagram of our application [Figure 3.4.1].

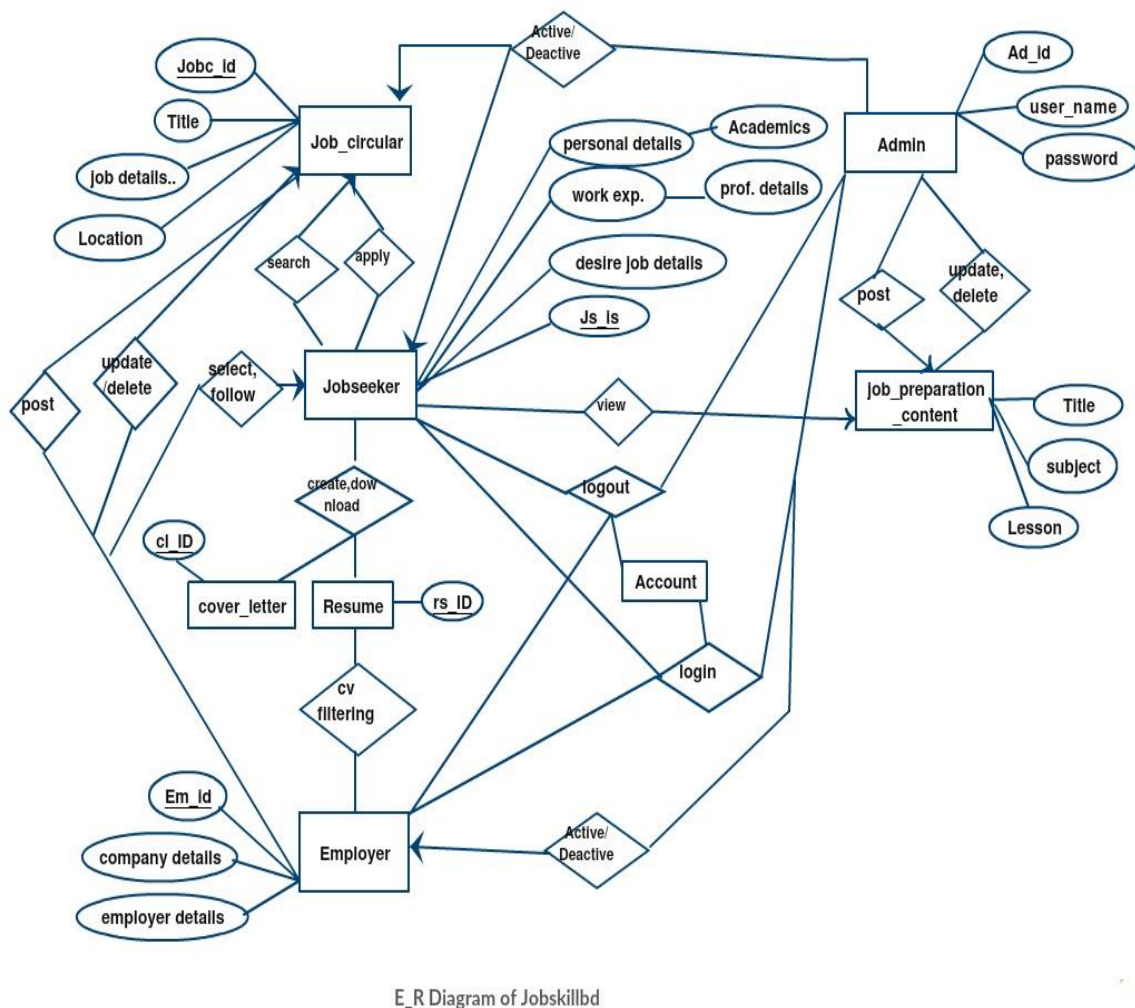


Figure 3.4.1: E-R diagram of the System

### 3.5 Design Requirements

Designing a system from the front end & back end play the main role as they are responsible to run the system smoothly. I have followed below points.

**User Friendly:** The application must be user friendly so that the job seeker can easily find and apply job. And employer can easily post job and filter cv.

**Compatible to various Device:** There are a lots of device and device to device screen size is differ. That's we use responsive website. So this application will support any size of screen.

**Efficient:** To run faster we have tried to keep this online job portal as light as possible. Now I am going to discuss some extra feature:

- This system will contain three types of users like job seeker, employer and Admin.
- Only Employer will post the job.
- Only Admin will can delete, update and create user and user info. If necessary.
- Job seeker will get notification when post new job.
- Employer can filter cv from huge amount of cv.
- Any user can't input any vulgar word in our system, our system can able to detect vulgar word.
- Student can get the number after s/he attended in the exam.
- Admin can delete Subject, chapter and question also.
- Employer must need to registration.



## CHAPTER 4

### DESIGN SPECIFICATION

A design specification is a detailed document providing information about a designed product or process. For example, the design specification must include all necessary drawings, dimensions, environmental factors, ergonomic factors, aesthetic factors, maintenance that will be needed, etc. It may also give specific examples of how the design should be executed, helping others work properly (a guideline for what the person should do) [7]. In this section we will show the front-end and back-end design of our application together with admin panel, job seeker panel and employer panel. We will also discuss about different tools and platforms that are used in our project.

#### 4.1 Front-end Design

Frontend web development is the practice of converting data to graphical interface for user to view and interact with data through digital interaction using HTML, CSS and JavaScript [8]. We have three sides of front-end design. One side for job seeker, other one side for employer and another side for admin. We say it before that in our project internet is a common fact. So now we will discuss about job seeker's front-end design then gradually we will discuss about employer and admin panel.



Figure 4.1.1: Home page of Jobskillbd.com

**Registration & Login page for User:** There is registration page for user. If job seeker wants to apply for job and want to get notification for recommended job then he/she must need to complete registration by provide information. And employer must need to registration for every types of action. After registration employer can post job circular, cv filtering and cv search. Employer can also update his/her profile. Registration login page shown in figure 4.1.2 , 4.1.3 and figure 4.1.4.

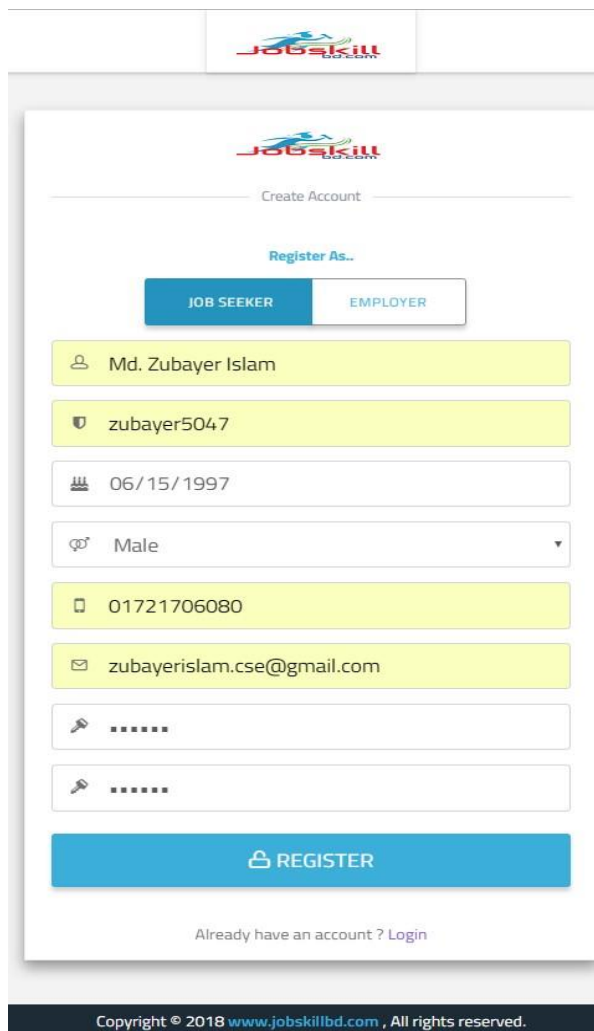


Figure 4.1.2: Job Seeker Registration page.

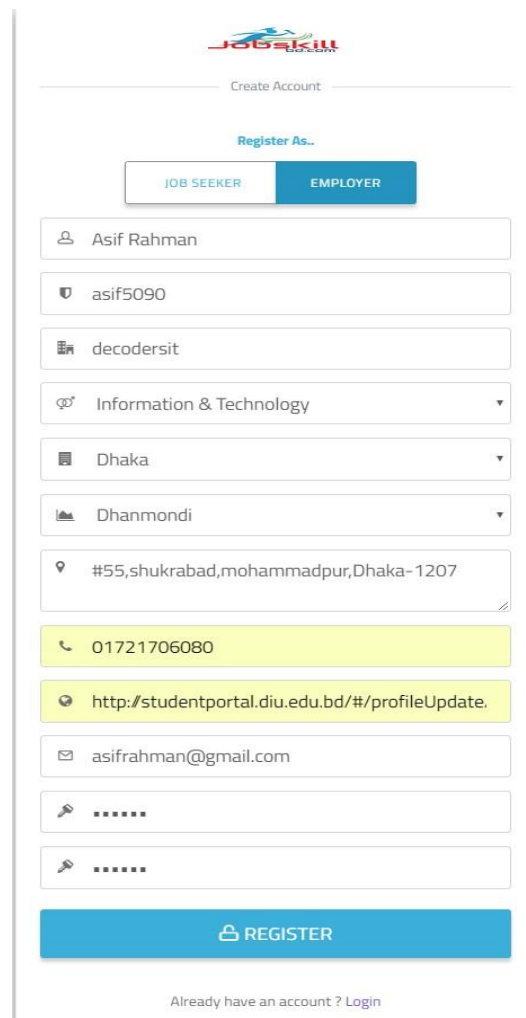


Figure 4.1.3: Employer Registration page

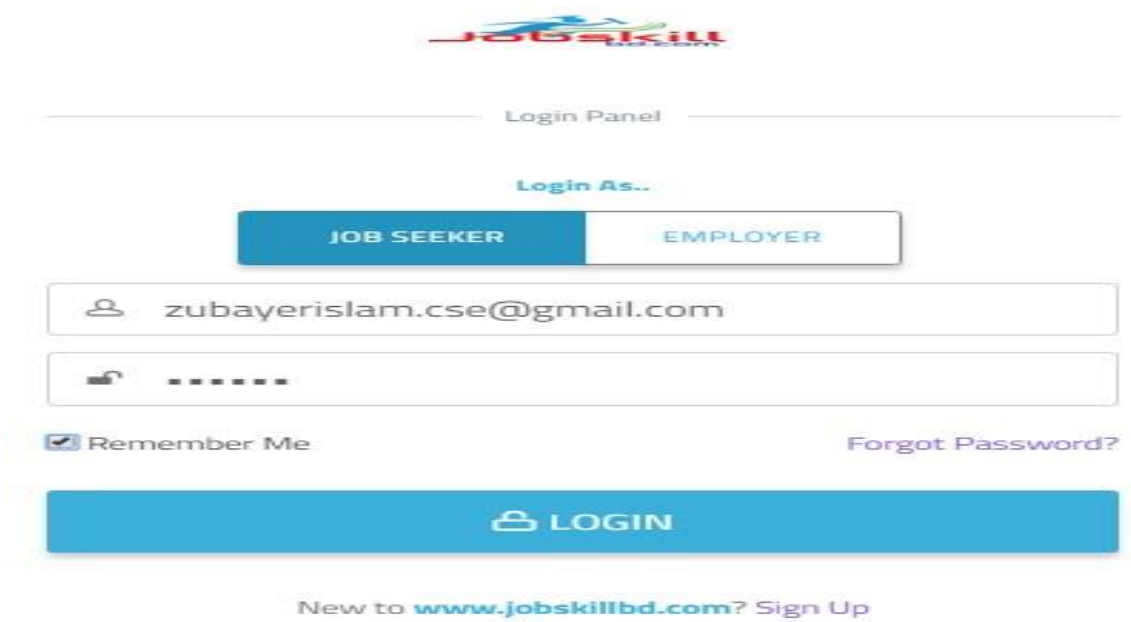


Figure 4.1.4: User Login Page.

**Job Seeker Dashboard:** After login job seeker can able to view his/her dashboard. In this dashboard job seeker see his/her all information at a glance. Job seeker dashboard page shown in figure 4.1.5.

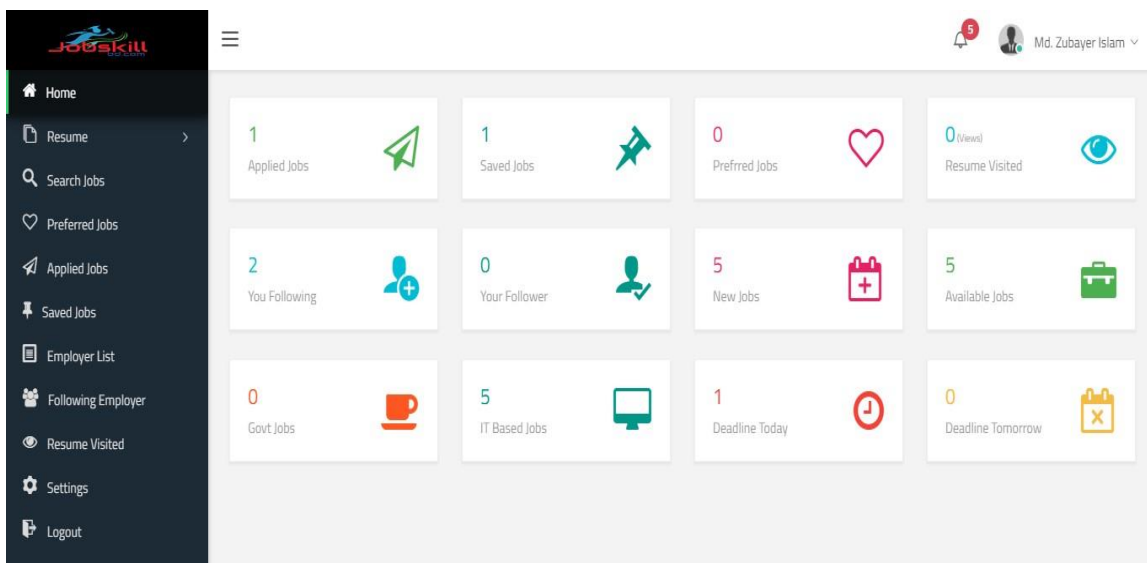


Figure 4.1.5: Job Seeker Dashboard.

**View and download resume page:** After login job seeker can able to view his/her resume and download the resume and cover letter. View and download resume page shown in figure 4.1.6.

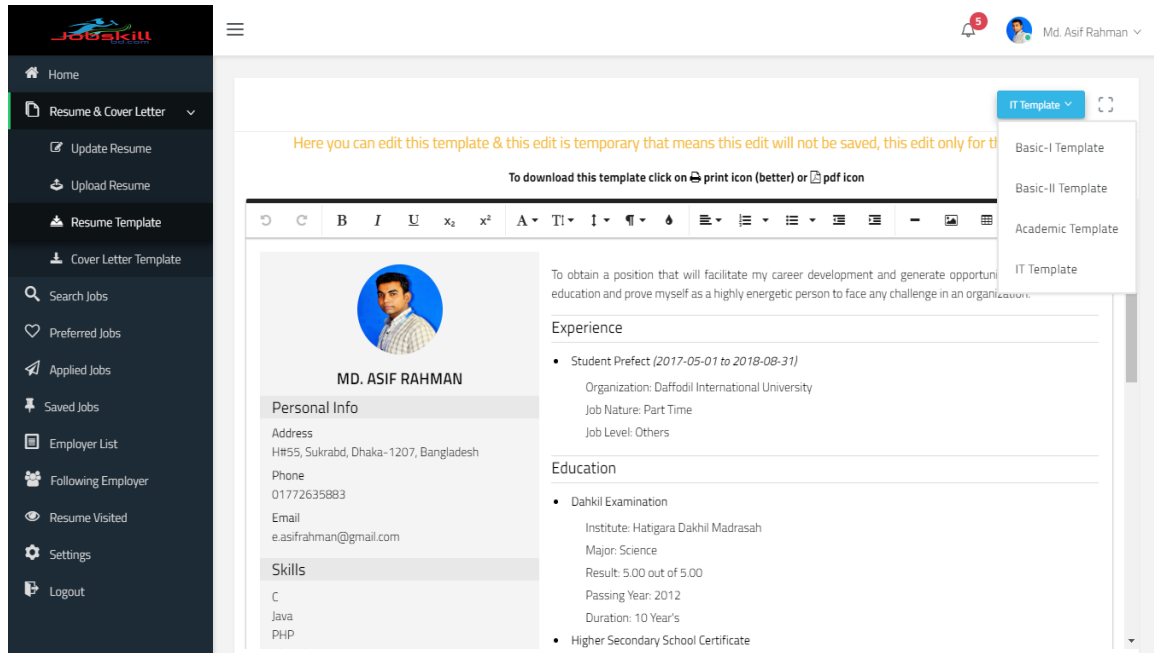


Figure 4.1.6: View and download Resume.

**Resume visitor and follower View page:** Job seeker can able to view how many employer visited his/her resume and how many follow him/her. Resume visitor and follower view page shown in figure 4.1.7.

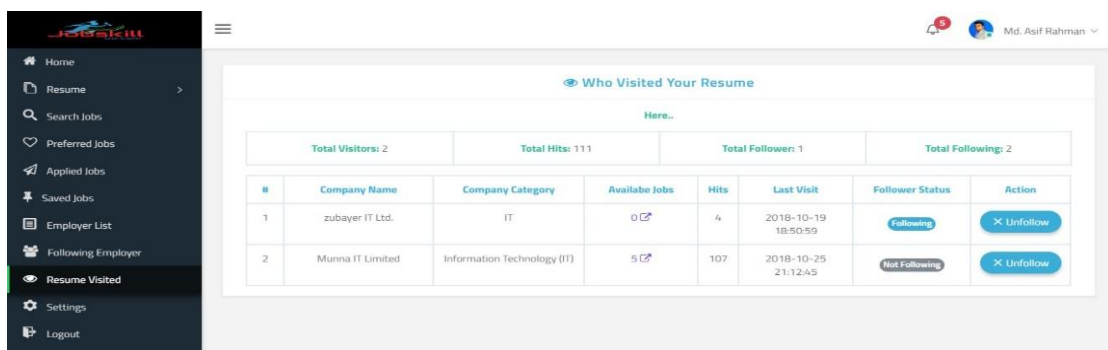


Figure 4.1.7: Resume Visited and follower.

**User Profile update page:** After login user can able to update their profile. They can change every information if they want. Profile update page shown in figure 4.1.8.

The screenshot shows a user profile update page. The user's name is 'Md. Zubayer Islam' and their profile picture is visible. A form titled 'Please fill out the \*required fields' contains the following information:

- Name: Md. Zubayer Islam
- Date of Birth\*: 06/15/1997
- Gender\*:  Male,  Female,  Others
- Marital Status\*: Married
- Nationality\*: Bnagladesh
- National ID: 19978815015000038
- Father Name\*: Md. Sirajul Islam
- Mother Name\*: nargish begaum
- Birth Certificate: 000000236436723

Buttons for 'Cancel' and 'Save' are at the bottom of the form.

Figure 4.1.8: Update resume.

**Resume and extra file Upload page:** After login user can able to upload his/her resume and career related information in his/her account. Resume and extra file upload page shown in figure 4.1.9.

The screenshot shows the 'Upload a New Resume' page. It includes an 'Upload Resume' section with a 'Choose File' button and a 'Download Resume' button. Below is a 'Preview' section showing a sample resume with an 'Academic Qualification' table.

Exam Title	Major	Institute	Result	Passing Year	Duration
Dakhil Examination	Science	Hatigara Dakhil Madrasah	1st	2012	10
Higher Secondary Certificate	Science	Bogra Cantonment Public School & College	4.10	2014	2
CSE	Computer Science & Engineering	Daffodil International University	3.80	2018	4

Figure 4.1.9: Upload and preview file.

**Job search and Job category View page:** Job seeker can able to view job circular without login the system. And user can search job using specific keyword. Job search and category view page shown in figure 4.1.10.

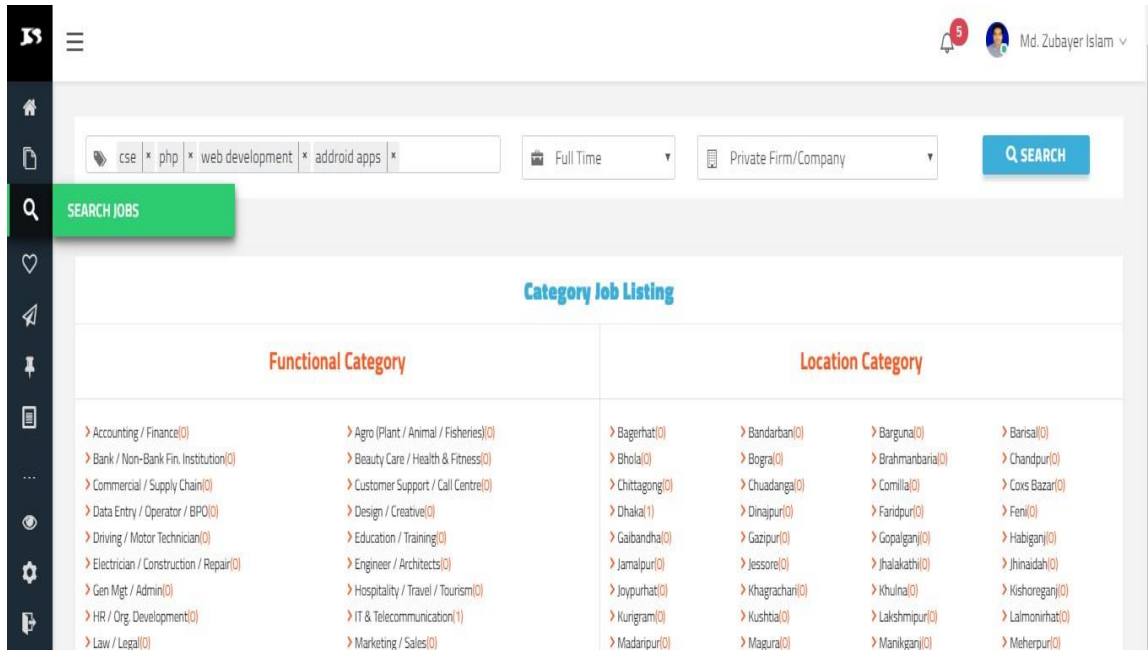


Figure 4.1.10: Job search and Job category.

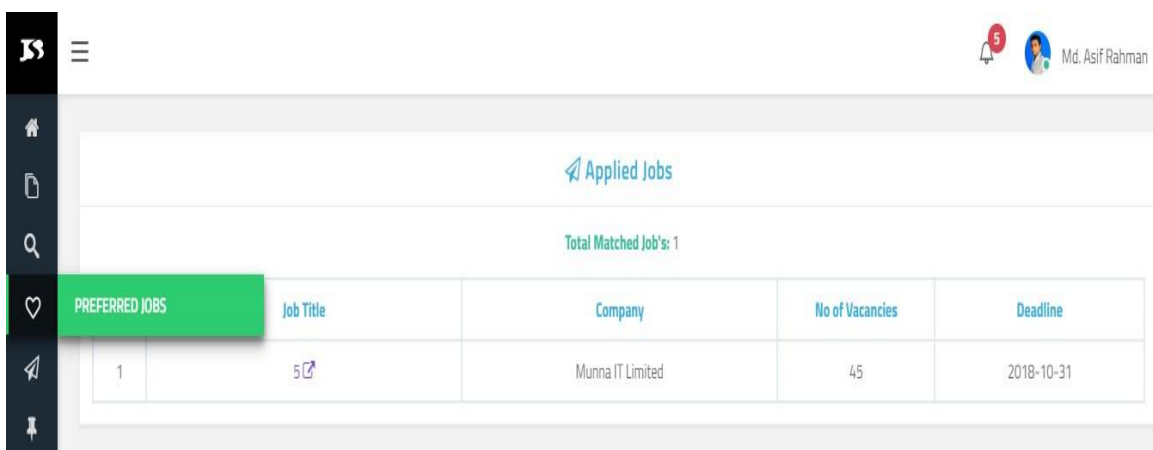


Figure 4.1.11: Preferred and matched job list.

**Job Circular post page:** After login employer can able to post job circular. He/She provide valid information in those form field then he/she can post job circular. Job circular posting form shown in figure 4.1.12.

**Job Post Form**

Please fill out the \*required fields

Job Title\* PHP Developer ✓

Job Category\* Web Development ✓

Job Description\* Php web developer need for pro ✓

No of Vacancies\* 100 ✓

Job Level\*  Entry  Mid  Top

Job Nature\*  Full Time  Part Time  Contractual  Internship

Job Location\* Dhaka ✓

Job Location Details shukrabad,Dhaka-1207 ✓

Skills Requirements\* php,javascript,html,css ✓

Gender Requirements\*  Any  Male  Female  Others

Figure 4.1.12: Job circular Post page.

**Applied Applicants**

Total Circular that are Applied: 6

#	Job Title	Job Category	No of Vacancies	Status	Deadline	Post Date	Total Application
1	Android Apps Development	Software Development	12	Active	2018-10-22	2018-10-25	4
2	Web development	NGO/Development	5	Active	2018-10-22	2018-10-23	1
3	6	Software Development	5	Active	2018-10-20	2018-10-21	1
4	5	IT & Telecommunication	45	Active	2018-10-19	2018-10-31	1
5	4	Web Development	45	Active	2018-10-19	2018-10-31	1
6	2	IT-Software	45	Active	2018-10-19	2018-10-31	1

Figure 4.1.13: Applied applicants Showing page.

**CV search and filtering page:** After login employer can able to search and filter cv using required specification. Employer select required keyword and click search icon then he/she can get filtered CV. CV search and filtering page shown in figure 4.1.14.

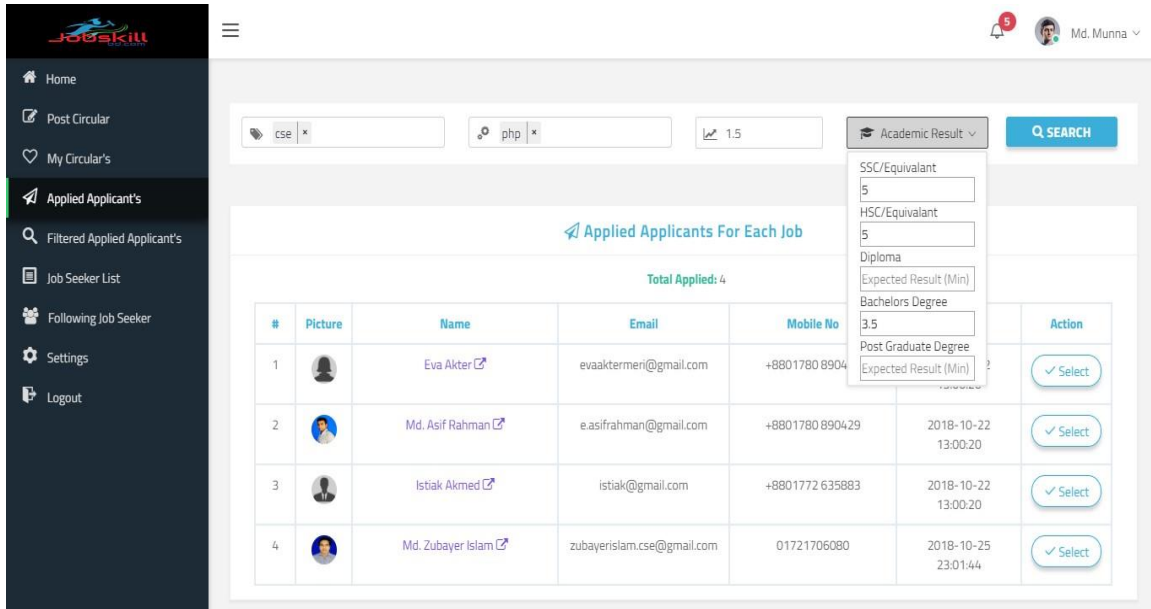


Figure 4.1.14: CV search and filtering page.

**User setting page:** After login user can able to change his/her user name, email, password in setting section. User Setting page shown in figure 4.1.15.

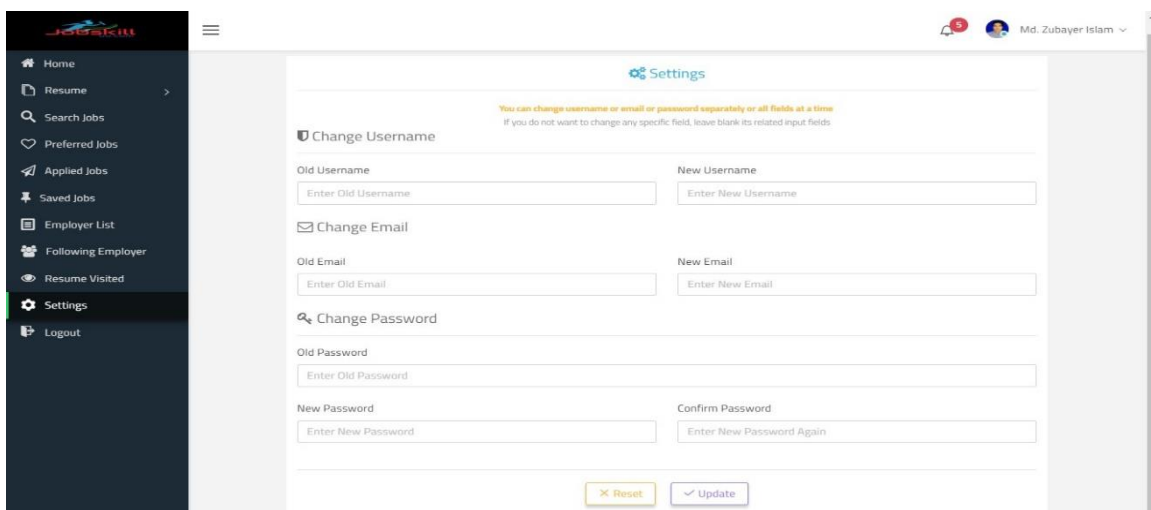


Figure 4.1.15: User Setting page.



**Cover letter template page:** There is cover letter template page for the jobseeker. After login job seeker can able to view his/her cover letter and download the cover letter. Cover letter template page shown in figure 4.1.16.

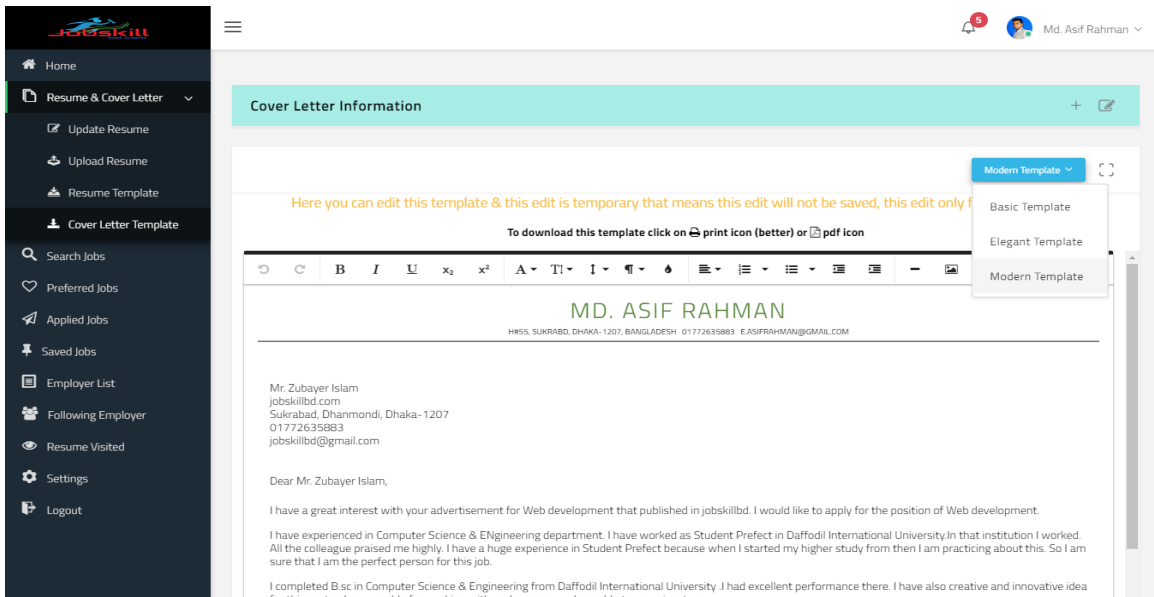


Figure 4.1.16: Cover letter template page.

**Job preparation content page:** There is job preparation content page for the user. User can able to get access job preparation content with login or without login in the system. They can take preparation in specific subject. Job preparation content page shown in figure 4.1.17.

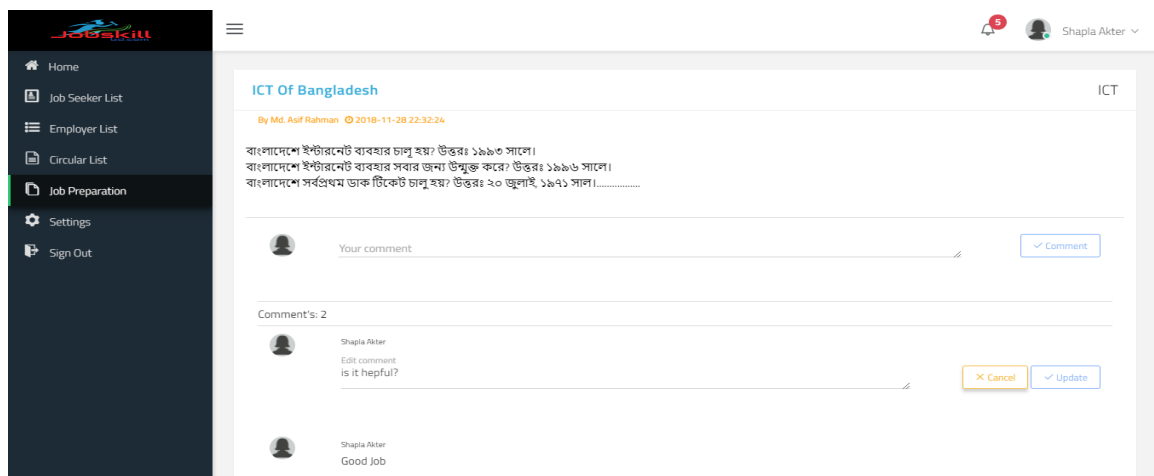


Figure 4.1.17: Job preparation content page.

**Login page for Admin:** There is home page for the admin. This Page is not showing in the system feature for security purpose. For accessing this page admin need to provide url address. Admin has to input the mail address and password and give security questions answer for login the system. Admin login page shown in figure 4.1.18.

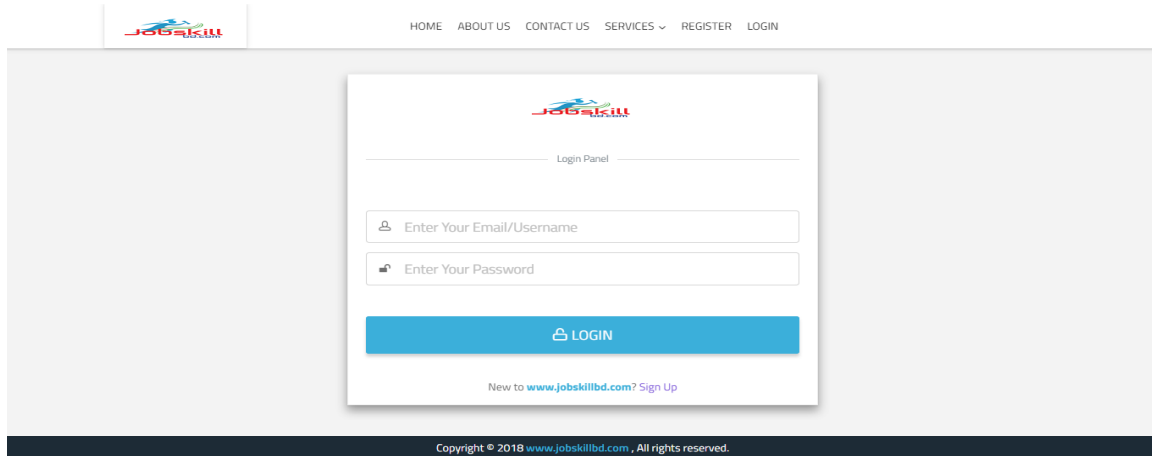


Figure 4.1.18: Admin login page.

**Admin panel Action:** After login admin can take action. Those action are update, delete, add user information. Those action will be maintains system properly. Admin action panel shown in figure 4.1.19.

#	Picture	Name	Email	Phone	Following	Follower	Applied	Saved	Visitors	Hits	Action
1		Munna	e@gmail.com	01721314151	0	0	0	0	1	1	Active Deactive Hide
2		Urmi	urmi@gmail.com	01721314151	0	0	0	0	0	0	Active Deactive Hide
3		Sapla Akter	shapla@gmail.com	01710203040	0	0	0	0	1	2	Active Deactive Hide
4		Istiak Akmed	istiak@gmail.com	+8801772635883	0	2	1	0	1	14	Active Deactive Hide
5		Md. Asif Rahman	asif@gmail.com	01772635883	4	2	17	6	2	150	Active Deactive Hide
6		Eva Akter	evaaktermer@gmail.com	+8801780890429	0	1	2	0	1	44	Active Deactive Hide

Figure 4.1.19: Admin Action panel page.

## 4.2 Back-end Design

Back end development refers to the server side of an application and everything that communicates between the database and the browser [9]. It is a logical part of an application that works in the back-end. There are many factors in back-end design like the scripting languages and the server side language, automated framework, database management, security, authentication, authorization, data parsing, data validating, data backups and so on. Shown in figure 4.2.1. I developed “Jobskillbd.com” online job portal using php, html, css, javaScript, ajax which is a server side language. In this web application all the logical thing and xampp local host server provide us the MySQL database in figure 4.2.1 for saving the data information and the work flow of the software. In local hosting we got xampp control panel which has the all the access of the database and code also database in figure 4.2.1 for saving the data information and the work flow of the software.

Web development is the coding or programming that enables website functionality, per the owner's requirements. It mainly deals with the non-design aspect of building websites, which includes coding and writing markup [10]

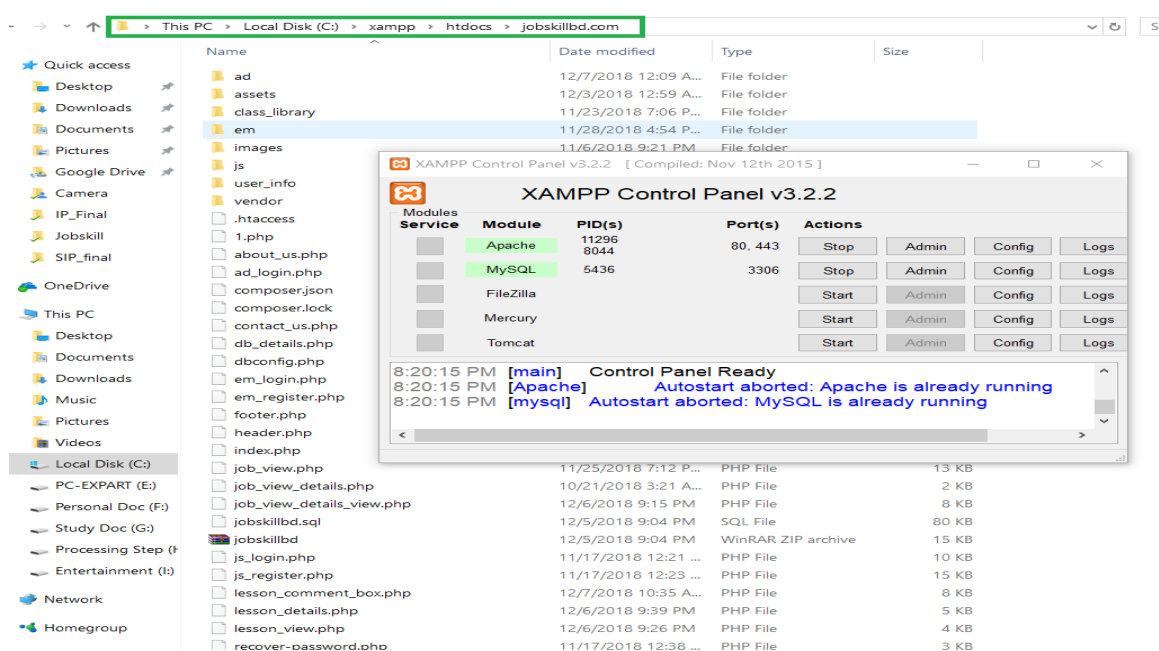


Figure 4.2.1: control panel of the system

#	Name	Type	Collation	Attributes	Null	Default	Com
1	id	int(250)			No	None	
2	email	varchar(250)	utf8_general_ci		No	None	
3	username	varchar(50)	utf8_general_ci		No	None	
4	full_name	varchar(100)	utf8_general_ci		No	None	
5	pic_dir	varchar(1000)	utf8_general_ci		No	not_defined_yet	
6	up_resume_dir	varchar(1000)	utf8_general_ci		No	not_defined_yet	
7	dob	date			No	None	
8	gender	varchar(20)	utf8_general_ci		No	None	
9	marital_status	varchar(20)	utf8_general_ci		Yes	NULL	
10	nationality	varchar(50)	utf8_general_ci		Yes	Bnagladesh	
11	nid	varchar(50)	utf8_general_ci		No	None	
12	birth_certificate	varchar(50)	utf8_general_ci		No	None	
13	father_name	varchar(100)	utf8_general_ci		Yes	NULL	
14	mother_name	varchar(100)	utf8_general_ci		Yes	NULL	
15	present_address	varchar(250)	utf8_general_ci		No	None	
16	permanent_address	varchar(250)	utf8_general_ci		No	None	
17	mobile_number	varchar(20)	utf8_general_ci		No	None	
18	phone_number	varchar(15)	utf8_general_ci		No	None	
19	alternative_email	varchar(250)	utf8_general_ci		No	None	
20	password	varchar(100)	utf8_general_ci		No	None	

Figure 4.2.2: Full Database of the system.

Table	Action	Rows	Type	Colla
admin	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_...
applied_job	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
career_info	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
certifications	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
circular_post	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8_...
circular_visited	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8_...
data_business_category	Browse Structure Search Insert Empty Drop	48	InnoDB	utf8_...
data_job_category	Browse Structure Search Insert Empty Drop	25	InnoDB	utf8_...
data_job_location	Browse Structure Search Insert Empty Drop	65	InnoDB	utf8_...
education	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
employer	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
em_following_js	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8_...
job_seeker	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
js_following_em	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
language	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
reference	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
resume_visited	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
saved_job	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
skills	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
targeted_job	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8_...
training_workshop	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
work_experience	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8_...
<b>22 tables</b>	<b>Sum</b>	<b>177</b>	<b>InnoDB</b>	<b>utf8_...</b>

Figure 4.2.3: Job seeker personal info table.

Server: 127.0.0.1 » Database: smartcareer » Table: education

Table structure

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(250)			No	None		AUTO_INCREMENT
2	js_id	int(250)			No	None		
3	degree_level	varchar(250)	utf8_general_ci		No	None		
4	degree_title	varchar(250)	utf8_general_ci		No	None		
5	major_subject	varchar(250)	utf8_general_ci		No	None		
6	institution	varchar(250)	utf8_general_ci		No	None		
7	result_system	varchar(10)	utf8_general_ci		No	None		
8	grade_scale	varchar(10)	utf8_general_ci		No	None		
9	result_achieved	varchar(10)	utf8_general_ci		No	None		
10	duration	varchar(10)	utf8_general_ci		No	None		
11	passing_year	varchar(10)	utf8_general_ci		No	None		
12	created_at	timestamp			No	CURRENT_TIMESTAMP		
13	updated_at	timestamp		on update CURRENT_TIMESTAMP	No	CURRENT_TIMESTAMP		ON UPDATE CURR

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	id	0	A	No	
Edit Drop	id	BTREE	Yes	No	id	0	A	No	

Figure 4.2.4: Educational information table (Job seeker)

Server: 127.0.0.1 » Database: smartcareer » Table: targeted\_job

Table structure

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	js_id	int(250)			No	None	
2	keywords	varchar(2000)	utf8_general_ci		No	None	
3	job_categories	varchar(1000)	utf8_general_ci		No	None	
4	job_location	varchar(1000)	utf8_general_ci		No	None	
5	business	varchar(1000)	utf8_general_ci		No	None	
6	created_at	timestamp			No	CURRENT_TIMESTAMP	
7	updated_at	timestamp		on update CURRENT_TIMESTAMP	No	CURRENT_TIMESTAMP	

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	js_id	3	A	No	
Edit Drop	js_id	BTREE	Yes	No	js_id	3	A	No	

Figure 4.2.5: Targeted job table (Job seeker)

Server: 127.0.0.1 » Database: smartcareer » Table: employer

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	<b>id</b>	int(250)			No	None	
2	<b>email</b>	varchar(250)	utf8_general_ci		No	None	
3	<b>username</b>	varchar(100)	utf8_general_ci		No	None	
4	<b>cp_name</b>	varchar(100)	utf8_general_ci		No	None	
5	<b>company_name</b>	varchar(250)	utf8_general_ci		No	None	
6	<b>company_category</b>	varchar(250)	utf8_general_ci		No	None	
7	<b>city</b>	varchar(50)	utf8_general_ci		No	None	
8	<b>area</b>	varchar(50)	utf8_general_ci		No	None	
9	<b>location</b>	varchar(250)	utf8_general_ci		No	None	
10	<b>mobile_number</b>	varchar(20)	utf8_general_ci		No	None	
11	<b>web_url</b>	varchar(250)	utf8_general_ci		No	None	
12	<b>password</b>	varchar(100)	utf8_general_ci		No	None	
13	<b>action</b>	varchar(10)	utf8_general_ci		No	None	
14	<b>created_at</b>	timestamp			No	CURRENT_TIMESTAMP	
15	<b>updated_at</b>	timestamp		on update CURRENT_TIMESTAMP	No	CURRENT_TIMESTAMP	

Check all With selected: Browse Change Drop Primary Unique Index  
Add to central columns Remove from central columns

Figure 4.2.6: Registration table (Employer).

Server: 127.0.0.1 » Database: smartcareer » Table: circular\_post

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>id</b>	int(250)			No	None		AUTO_INCREMENT
2	<b>em_id</b>	int(250)			No	None		
3	<b>company_name</b>	varchar(250)	utf8_general_ci		No	None		
4	<b>job_title</b>	varchar(100)	utf8_general_ci		No	None		
5	<b>job_category</b>	varchar(100)	utf8_general_ci		No	None		
6	<b>job_description</b>	varchar(1000)	utf8_general_ci		No	None		
7	<b>vacancies_no</b>	int(10)			No	None		
8	<b>job_level</b>	varchar(10)	utf8_general_ci		No	None		
9	<b>job_nature</b>	varchar(20)	utf8_general_ci		No	None		
10	<b>job_location</b>	varchar(250)	utf8_general_ci		No	None		
11	<b>details_location</b>	varchar(250)	utf8_general_ci		No	None		
12	<b>skills_requirements</b>	varchar(500)	utf8_general_ci		No	None		
13	<b>gender_requirements</b>	varchar(10)	utf8_general_ci		No	None		
14	<b>age_requirements</b>	varchar(20)	utf8_general_ci		No	None		
15	<b>experience_years</b>	varchar(20)	utf8_general_ci		No	None		
16	<b>educational_requirements</b>	varchar(250)	utf8_general_ci		No	None		
17	<b>additional_requirements</b>	varchar(1000)	utf8_general_ci		No	None		
18	<b>salary_range</b>	varchar(100)	utf8_general_ci		No	None		
19	<b>salary_details</b>	varchar(250)	utf8_general_ci		No	None		
20	<b>extra_facilities</b>	varchar(250)	utf8_general_ci		No	None		
21	<b>apply_instructions</b>	varchar(250)	utf8_general_ci		No	None		
22	<b>application_deadline</b>	date			No	None		
23	<b>posted_at</b>	timestamp			No	CURRENT_TIMESTAMP		

Figure 4.2.7: Job circular post table.

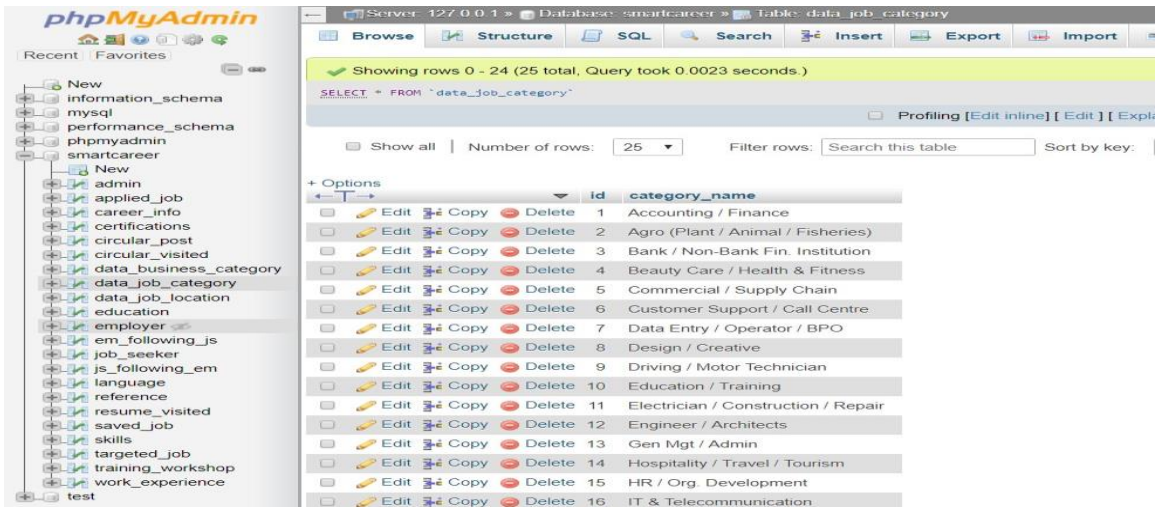


Figure 4.2.8: Job category table.



Figure 4.2.9: Circular status table.



Figure 4.2.10: Admin login table.

### **4.3 Interaction Design and UX**

Interaction design, often abbreviated as IxD, is "the practice of designing interactive digital products, environments, systems, and services." While the digital side of this statement is true, interaction design is also useful when creating physical (non-digital) products, exploring how a user might interact with it [11]. Interaction design is a proper way that observes the interaction between a system and its user. Actually interaction design is the processes which understand the user problem, process the problem and find out the results, perform actions by the respecting results and solve the problem.

On the other hand, user experience focuses on the overall experience design between a user and an application. In our web application, employer can post job circular and filtering CV using keyword. And Job seeker can search job and apply job and also create their cv.Both user can helpful using the web application. For UX we have tested it by fifteen peoples. In those people thirteen are said the interface of the application is enough user friendly. Two of them said it ok but it will be very good if you add demo promotional slider. Based on their comment we can say that this application's UI is user friendly.

### **4.4 Implementation of Requirements**

To implement this project We need sublime text editor for PHP, HTML, CSS, Bootstrap, java script, Ajax coding and xampp server for localhost. We need Photoshop to design UI/UX. We need all the tool to work with this project already we have discussed above. Our application is web base that's why we need to domain name and hosting space.



## **CHAPTER 5**

### **IMPLEMENTATION AND TESTING**

#### **5.1 Implementation of Database**

The implementation phase is where we install the DBMS on the required hardware, optimize the database to run best on that hardware and software platform, and create the database and load the data. Create the database and tables. Load the data [12]. The database implementation means where we install the DBMS on the required hardware, optimize the database to run best on that hardware and software platform, and create the database and load the data.

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

We have tried to better front-end design in this online job portal web application. We used HTML5,CSS3,PHP Ajax, JQuery, Bootstrap for front end design and java script that's makes the better user interface. In front end implantation we used font awesome for better look and better font. We want to make the user friendly and attractive design in our web application project. So that all user and all types of user can easily use our system.

#### **5.3 Implementation of Interactions**

Here to make our system interactive We have implemented responsive UI for better user experience. In the cases make things easy we use icon, text link and button. The system design of our application is user friendly.

#### **5.4 Testing Implementation**

System Testing is a level of the software testing where a complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements. Definition by ISTQB. system testing: The process of testing an integrated system to verify that it meets specified [13]. Testing implementation is process of testing for implementation of a system, where a tester or system architect will see cases and specification, is it implementable or have limitations to develop this system.

Table 5.4.1: Test case evaluation

Test case	Test input	Expected outcome	Obtained outcome	Pass / Fail	Tested on
1. Login	Login by various browser	Login successfully	Successful login	pass	07-10-18
2. Update information	Need to input information from user account.	Information will be updated in the database.	Information have been updated in the database.	pass	20-10-18
3. CV Create	Need to input cv information in the job seeker's profile	Cv information will be added in the database.	Cv information have been added in the database.	Pass	20-10-18
4. Job Circular post	Input job information in the employers panel.	Job post added in the database and visible for user	Successfully added in database and visible for user.	pass	21-10-18
5. Interface testing	Check in various types of device.	Every device support perfectly	Supported in all device & browser	Pass	21-10-18
6. Vulgar word detection	Need to input vulgar word in any input field	Detect vulgar word and show warning.	Successfully detect vulgar word and show warning.	Pass	21-10-18

7. Apply Job	Need to apply posted job.	Apply successfully for posted job and show message	Successfully apply and show confirmation message.	Pass	22-10-18
8. Search Job	Input specific key word in search field and click search icon	Show specific job.	Show specific job successfully.	Pass	22-10-18
9. Cv and Cover letter download	Need to login going to view resume option and click download icon	Download Cv and cover successfully.	Successfully Download cv and cover letter.	Pass	23-10-18
10. Cv search and filtering	Need to login going to Cv search option and input keyword and click search icon	Show matched Cv.	Successfully show matched Cv.	Pass	23-10-18
11. Add, Update, Delete posted Job	Need to login and going to circular post option and click add/update/delete action.	If click add job circular is added, if click delete posted job circular deleted.	Successfully added, updated and deleted job post.	pass	23-10-18

12. Notification Test	Need to go user dashboard.	Notification icon show how many notification received.	Successfully show notification.	pass	23-10-18
13. Application not responding	Application is testing in various device.	No responding is very much rare.	ANR problem ration is very much rare like 0.01%	Pass	16-10-18

## 5.5 Test Results and Reports

Test report is needed to reflect testing results in a formal way, which gives an opportunity to estimate testing result quickly. It is a document that records data obtained from an evaluation experiment in an organization manner, describe the environmental or operating conditions, and shows the comparison of test results with objectives.

In this chapter we have shown that all the test case test input, expected output, actual output and finally we find our results and the test result was quite successful. Our application is satisfied by the user. Usability testing examines the following feature of our web application.

- How easy it is to use the application?
- How convenient is the application to end-user?

So at the end of the development we can carry out the results as the benefits of usability testing to the end of the user or learner.

- Better application.
- User friendly and better UI for design.
- Application is more understandability accepted by users.

## **CHAPTER 6**

### **CONCLUSION AND FUTURE SCOPE**

#### **6.1 Discussion and Conclusion**

All the thanks go to almighty ALLAH who has blessed us with this innovative idea. Thanks to our supervisor who have help me a lot to complete this project successfully.

The idea is to make an interactive Web based application that will interact between job seeker and employer by applying job and posting job. We still need to cross a lot of hurdle to make it fully functional. By the grace of one & only almighty ALLAH if we can do this, it will help job seeker to find all types of job and create powerful cv, Employer can easily post job and recruit candidate easily. So this web application will give a great outcome we hope.

#### **6.2 Limitations**

- Do not have real time chatting system in this application
- Need to added analysis system for specific sector.
- Need to increase security issue.
- Result is now count in Share Preferences.
- Only developed in android platform.
- Some features need to be included such as exam system, Video interview system.

#### **6.3 Scope for Future Developments**

- Our mission is to make this web application converted into MVC format.
- Our application's data needs more storage in future, so we will add this with our own server and database.
- We will add human resources management system in our system.
- We will add real time chat system, online exam system and video viva system in our system.

## REFERENCES

- [1] “Wikipedia” Web Browser:  
[https://en.wikipedia.org/wiki/History\\_of\\_the\\_web\\_browser](https://en.wikipedia.org/wiki/History_of_the_web_browser) [last accessed:10-09-18 at 12.00 am].
- [2] “Bdjobs” About BdJobs: <http://www.bdjobs.com/about.asp> [last accessed: 10-09-18 at 01.00 am].
- [3] “Techopedia” Web based defination:  
<https://www.techopedia.com/definition/26002/web-based-application> [last accessed: 10-09-18 at 01.30 pm].
- [4] “AJAX” Ajax Loading <https://support.squarespace.com/hc/en-us/articles/115000253288-Ajax-loading> [last accessed: 11-09-18 at 11.00 pm]
- [5] “Wikipedia” Use case at [https://en.wikipedia.org/wiki/Use\\_case](https://en.wikipedia.org/wiki/Use_case), [last accessed on 05-10-2018 at 8:30pm].
- [6] “ERD” available at <https://www.smartdraw.com/entity-relationship-diagram>, [last accessed on 06-10-2018 at 9:30pm].
- [7] “Design Documentation” available at [https://en.wikipedia.org/wiki/Design\\_specification](https://en.wikipedia.org/wiki/Design_specification) [last accessed on 09-10-2018 at 11:00pm].
- [8] “Font-end Design” available at [https://en.wikipedia.org/wiki/Front-end\\_web\\_development](https://en.wikipedia.org/wiki/Front-end_web_development) [last accessed on 09-10-2018 at 11:30pm].
- [9] “Back-end Design” available at <https://www.coursereport.com/blog/front-end-development-vs-back-end-development-where-to-start/#What%20is%20Back%20End%20Development> [last accessed on 09-10-2018 at 11:30pm].
- [10] “Back-end Design” available at <https://www.techopedia.com/definition/23889/web-development> [last accessed on 09-10-2018 at 11:30pm].
- [11] “Interaction design” available at [https://en.wikipedia.org/wiki/Interaction\\_design](https://en.wikipedia.org/wiki/Interaction_design) [last accessed on 11-10-2018 at 9:00pm].
- [12] “Implementation of Database” available at <https://mariadb.com/kb/en/mariadb/database-design-phase-3-implementation> [last accessed on 12-10-2017 at 10:00pm].
- [13] “System Testing” Available: [softwaretestingfundamentals.com/system-testing](http://softwaretestingfundamentals.com/system-testing) [last accessed: 22-10-18].

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