



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Fall20_21

Section: G

Group No: 09

Job Recruitment System

A software Engineering project submitted
By

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The project will be Evaluated for the following Course Outcomes

Requirements Analysis (functional, quality, and project requirements)	[5Marks]	Total Marks
System Design (UML, UI/UX design)	[5Marks]	
Test and Project Management Planning	[5Marks]	
Submission, Completeness, Spelling, Grammar and Organization	[5Marks]	

Submission Date : 19/12/2020

1. PRODUCT AND PROJECT DESCRIPTION

1.1 System Features

1. Registration

Functional Requirements

1.1 The software shall allow user to register with their email id & phone number.

1.2 Without registration user can only visit in the home page. There are few options & necessary information in home page .After registration user can able to use other features of the software.

1.3 In registration section user have to fulfill a form. Where user have to give some necessary information about himself which will be helpful in identifying him .

Priority Level: High

Precondition : User have valid email id & phone number .

Cross-references :

2. System Login

Functional Requirements

2.1 Users will be able to log in their account by entering username and password.

2.2 If the username and/or password has been inserted wrong for more than three times, a random verification code will be generated by the system to retry login.

2.3 There will be a limit of login attempts in the system after that system shall automatically lock the user account login for Three hour.

Priority Level: High

Precondition : User have valid email id & password.

Cross-references :1.1

3. Profile creation

Functional Requirements

3.1 The software shall allow user to create a new profile in different module.

3.2 Profile name should be **unique** .So that at the end of the name , user have to give four random numbers .User can chose those number by himself or system will generate those number automatically .

3.3 The user have to input a valid password for his profile. If the password is not valid the system will notify the user .

Priority Level: High

Precondition : User must be registered .

Cross-references : 4.2 , 4.3.1 , 4.3.1

4. Modules :

Functional Requirements

4.1 There will be three different types of module .Those are :

- Admin Module
- Employee Module
- Employer Module

4.2 In admin module

- Maintain details of all employees & employers .
- Provide & notify necessary information .
- Can block employee & employer profile .

4.2 In employee module

- Create personal profile
- Provide his skills or capable in which sector/category .
- Provide his necessary documents .

4.3 In employer Module there will be two section :

- Industrial
- Non-Industrial

4.3.1 In **Industrial Section** every institution are required to create own profile with proper documents & information. After checking documents& information their profile will be verified by Admin. Once verification is done then they will able to give recruitment notice .

4.3.2 **Non-Industrial Section** is for small institutions or someone's personal recruitment (like home tutor , designer) . There will be many categories base on work. They have to select their category & then give recruitment notice. It will be easier for both the employee & those who are interested in hiring.

Priority Level: High

Precondition : User must be registered .

Cross-references : 1 , 3

5. Recover Password

Functional Requirements

5.1 The system will have module named as **forgot password** . Using this module user can easily reset their password . They only need to put their registered email Id click on enter.

5.2 The user will receive a confirmation email where they will have the option to reset the password. One can easily use this module and get rid of forgetting password problem.

Priority Level : High

Precondition : User have valid email id& internet connection .

Cross-references : 1

6. Search :

Functional Requirements

6.1 The employers who are interested in hiring can search for employees by searching the job categories. With this facility they can visit employees profile & can hire them .

6.2 The employees who are looking for job can search company profile or job categories . There they can find job circular & can apply for that job .

Priority Level: High

Precondition : User have to login with their profile .

Cross-references : 4.2 , 4.3.

7. Follow :

Functional Requirements

7.1 employees can follow company profile or employer profile for further new updates& job circular.

Priority Level: Medium

Precondition : Employees have to use their profile .

Cross-references :4.3.1

8. Updating Profile :

Functional Requirements

8.1 The software will allow employees and employers to update their information on profile.

8.2 There will be an Edit Profile option by clicking which they can update their information.

Priority Level: High

Precondition : User have to log in their profile.

Cross-references : 3

9. Deleting Profile :

Functional Requirements

9.1 The software shall allow Admin and Users to delete their profile.

9.2 Once the **Delete Account** option is clicked, the software will ensure again if the user really want to delete it or not by showing a **yes/no** option.

Priority Level: High

Precondition : User have to log in their profile.

Cross-references : 3

10. Notification

Functional Requirements

10.1 If employers decide to hire an employee, the employee will get a notification .

10.2 If an employee applying on a circular then the company or employer will get a notification.

10.3 If followed company give recruitment notice or any updates then employees will get notification.

Priority Level: Medium

Precondition : User have to log in their profile.

Cross-references : 7.1

11. Logout

Functional Requirements

11.1 After visiting the websiteUsers will be able to logout from their account.

Priority Level: High

Precondition : User have to log in their profile.

Cross-references : 2.1 , 3

1.2 System Quality Attributes

AVAILABILITY

AV-1. The system shall be at least 97 percent available on weekdays between 6:00 a.m. and midnight local time, and at least 99 percent available on weekdays between 10:00 p.m. and 4:00 p.m. local time.

Priority Level: High

PERFORMANCE

PE-1. Every Web page shall download in 15 seconds or less over a 50 KBps modem connection.

Priority Level: High

INTEGRITY

IN-1. Only Admin who have Auditor access privileges shall be able to view customer data.

Priority Level: High

FLEXIBILITY

FL-1. A maintenance programmer who has at least four months of experience supporting this product shall be able to make a new copy output available to the product, including code modifications and testing, with no more than three hours of labor.

Priority Level: High

EFFICIENCY

EF-1. At least 65 percent of the processor capacity and RAM available to the application shall be unused at the planned peak load conditions.

Priority Level: Medium

PORTABILITY

PO-1. The software should run in Windows , Android & Mac .

Priority Level: Medium

RELIABILITY

RE-1. No more than ten experimental runs out of 1000 can be lost because of software Failures.

Priority Level: Medium

1.3 Project Requirements

Time :Need about 6 to 7 months to develop this software .

Human Resource :Need around 14 to 18 people to develop this software .

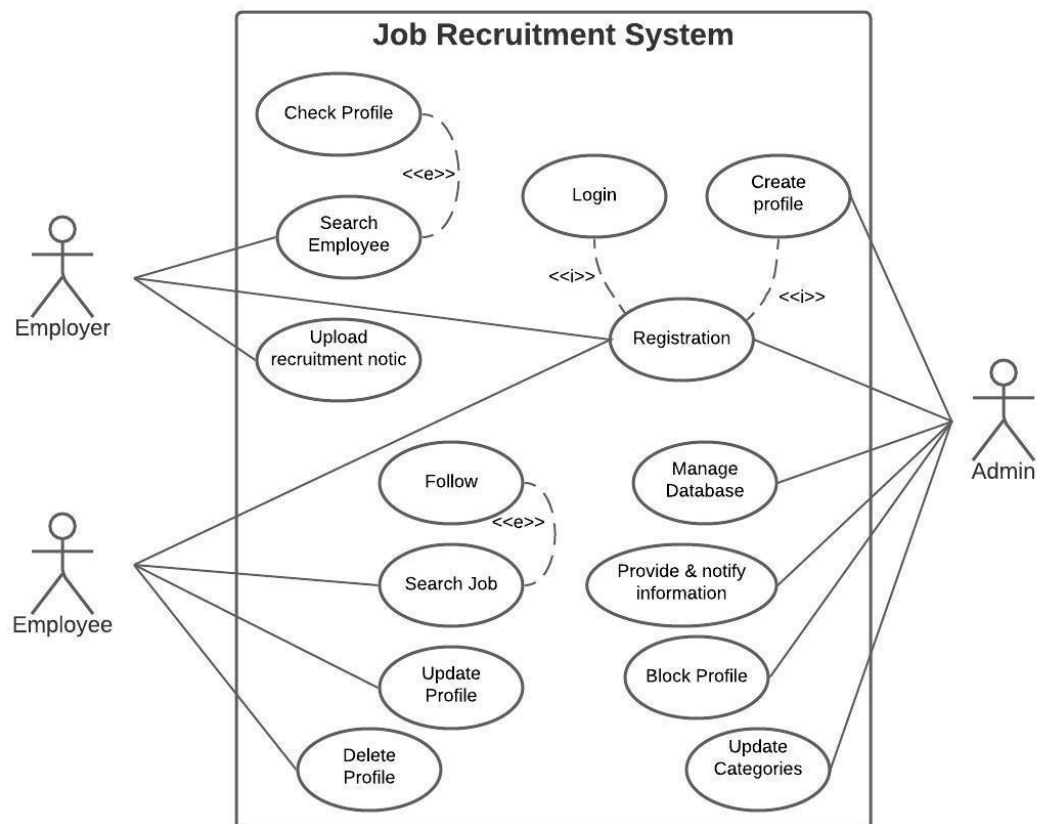
Budget :For the development of this project total 700000\$ (BD) is required .

2. SYSTEM DESIGN SPECIFICATION

2.1 System Design

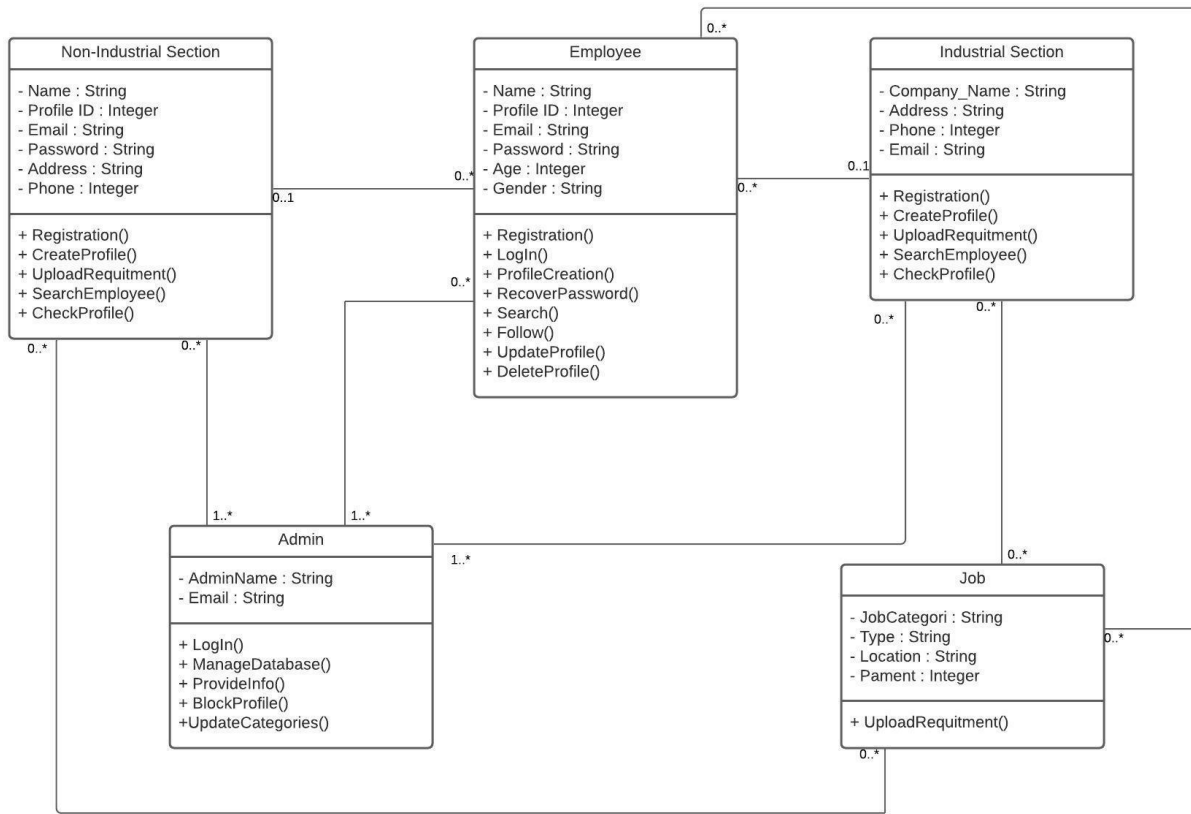
Use Case Diagram :

There are three actors **Admin**, **Employee** & **Employer** in our use case diagram. Actors create an account to have access to all the features. Admin manages the detail of all the employee and employer. Admin check all the documents & information which is provided by the **employee & employer**. Admin also provide & notify information to the employee & employer. Admin can block user profile in case of any untoward incident . Both employee and employer have the authority to delete and update their profile. Employers can search for employees by searching the job categories & employee also can search job by searching company profile or job categories.



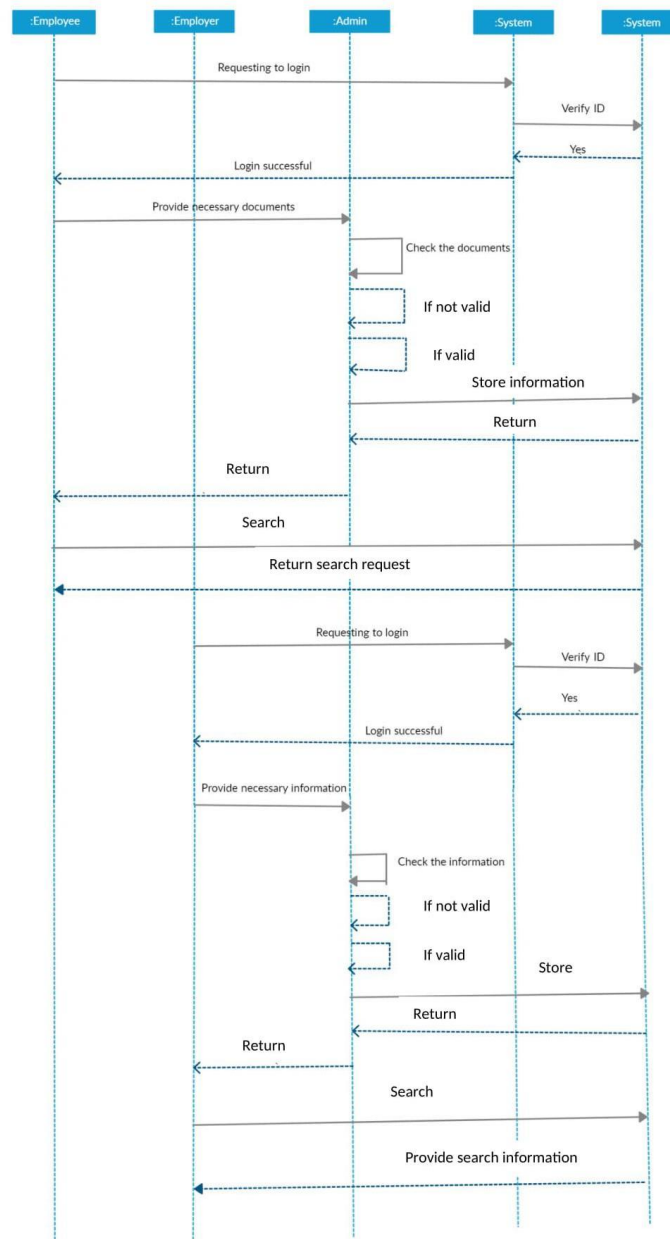
Class Diagram :

There are five classes with some attributes and methods. Every class has both set method and get method. Both **Industrial** section & **Non-Industrial** section can give many recruitment notice & employee also can apply for many job **Industrial section & Non-Industrial section** can have many employee but one employee can't work with more than one company.



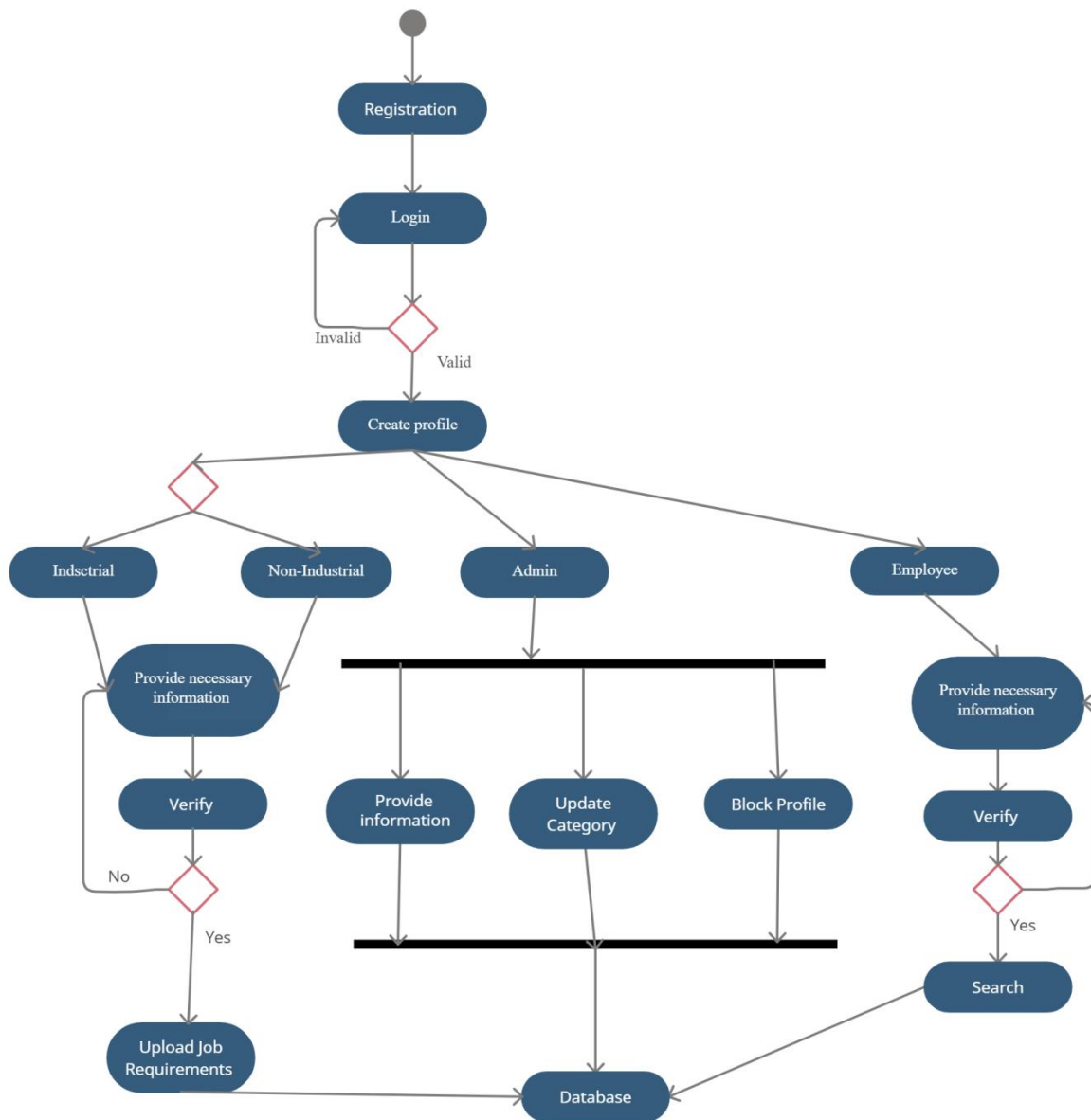
Sequence Diagram :

Both **employee & employer** will request to log in into the system for verifying his/her identity. System confirms if the account exists or not. If the login verification is unsuccessful, the system notifies that no account found and request to try again. If the login verification is successful then they will be able to use other features. For **create or update profile** user have to provide necessary documents & information, admin will modify those information. If those information are valid then it will be stored in database else not. User can search for information and if it is available in database then database will provide **search information**.




Activity Diagram :

A user attempts to login into the system. If the login is successful then the system decides if the account is for admin or employee or industrial section or non-industrial section. If the login is failed the system checks whether it is for wrong input or there is no one in the system. So, the system wants the user to **re-check** the information or create a new account and add necessary information. For crating profile **employee, industrial section and non-industrial section** have to provide necessary information. If their information is valid they can do further work else they have to return that stage again . If industrial section or non-industrial section upload any job requirements or admin block any user or any other updates will store in the database.



2.2 UI/UX Design

Welcome to EasyEmployment



Username

Password

Sign in

Sign up

[Forgot password?](#)

Create account

First name

Last name

Contact number


Email

Password



Address

SELECT USER CATEGORY

SELECT REIGN

INSERT DOCUMENT 

SIGN UP

User Name:  

EasyEmployment

Search

Country User category Work category Employee category

contact us

Find your suitable job / employee

SEARCH EMPLOYEE

Find the right job

Search by keyword

Search

DIVISIONAL JOBS

Shikhar (184) Barishal (56) Nuhra (89)

Sylhet (82) Chittagong (172) Rajshahi (72)

Rangpur (51) Mymensingh (184)

QUICK LINKS

» Find jobs (24 hrs)

» Contractual jobs

» Oversee jobs

» Work from home

3. SYSTEM TEST PLAN

Functional Requirements

Project Name: Job Recruitment System		Test Designed by: Shethil Ahammed		
Test Case ID: FR_1		Test Designed date: 10/12/2020		
Test Priority (Low, Medium, High): High		Test Executed by: Ayesha Amin		
Module Name: Registration Session		Test Execution date: 15/12/2020		
Test Title: Verify login with valid information				
Description: Test website application registration feature.				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the website application. 2. Click Sign up. 3. Enter First Name. 4. Enter Last Name. 5. Enter Contact Number. 6. Enter Email . 7. Enter password. 8. Address 9. Choose Category. 10. Click Sign UP.	First Name: Tamin Last Name: Ikbal Contact Number: 01914040955 Email : Tamim@gmail.com Password: 12345 Address : Uttara . Category: Employee	User should register successfully	As expected	Pass
Post Condition: User validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: Job Recruitment System		Test Designed by: Shethil Ahammed		
Test Case ID: FR_2		Test Designed date: 11/12/2020		
Test Priority (Low, Medium, High): Medium		Test Executed by: MD Sabbirul		
Module Name: System Login		Test Execution date: 17/12/2020		
Test Title: verify login with valid username and password				
Description: Test website login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click submit	Username: Sabbir Raman Password: 321	User should login into the application	As expected	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: Job Recruitment System		Test Designed by : Sakib Hasan		
Test Case ID: FR_3		Test Designed date: 12/12/2020		
Test Priority (Low, Medium, High): Medium		Test Executed by: MD Sabbirul		
Module Name: Recover Password		Test Execution date: 17/12/2020		
Test Title: Verify user new password.				
Description: Test website application forget password feature.				
Precondition (If any): User must have valid email or phone number .				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the website application. 2. Click Forget Password. 3. Enter Email id or Phone number. 4. Verify mail 5. Enter New Password. 6. Click Submit.	Email : Tamim@gmail.com New Password: 12345	User password should change & login to the website	As expected	Pass
Post Condition: User successfully login to account.				

Project Name: Job Recruitment System			Test Designed by: Shethil Ahammed		
Test Case ID: FR_4			Test Designed date: 13/12/2020		
Test Priority (Low, Medium, High): Medium			Test Executed by: Ayesha Amin		
Module Name: Search season			Test Execution date: 17/12/2020		
Test Title: Verify the Searching data					
Description: Test web application searching data feature					
Precondition (If any): User must have to login					
Test Steps		Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the web application. 2. Login into the application. 3. Enter Desire information. 4. Click Search.		Search: desire item	System would provide the search information	As expected	Pass
Post Condition: User has been provided search desire information.					

Project Name: Job Recruitment System	Test Designed by: Shethil Ahammed
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Test Case ID: FR_5			Test Designed date: 13/12/2020	
Test Priority (Low, Medium, High): Medium			Test Executed by: Ayesha Amin	
Module Name: Delete Profile season			Test Execution date: 17/12/2020	
Test Title: Remove user profile				
Description: User profile & information remove from database				
Precondition (If any): User must have to login				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the web application. 2. Login into the application. 3. Go to delete profile 4. Give user password again 5. Click remove button	Password : 12345	User profile remove from database	As expected	Pass

Project Name: Job Recruitment System			Test Designed by : Sakib Hasan	
Test Case ID: FR_6			Test Designed date: 14/12/2020	
Test Priority (Low, Medium, High): Medium			Test Executed by: MD Sabbirul	
Module Name: Logout season			Test Execution date: 17/12/2020	
Test Title: Remove user form the website				
Description: User log out from the site				
Precondition (If any): User must have to login				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the web application. 2. Login into the application. 3. Click logout button 4. Press confirm button		User logout form the site	As expected	Pass
Post Condition: For visiting the website user have to log in again.				

Project Name: Job Recruitment System		Test Designed by : Sakib Hasan		
Test Case ID: FR_7		Test Designed date: 15/12/2020		
Test Priority (Low, Medium, High): Medium		Test Executed by: MD Sabbirul		
Module Name: Updating profile		Test Execution date: 18/12/2020		
Test Title: Verify user information update to database				
Description: User new information or documents should save to database.				
Precondition (If any): User must have to login				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Open the web application. 2. Login into the application. 3. Go to profile 4. Select upload or edit option 5. Provide new information 6. Press confirm button	Upload / Edit : 404.jpge	User new Information or documents uploaded	As expected	Pass
Post Condition: User see his/her updated information or document.				