Job Explorer System

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Final Approval

This is to certify that we have read the report submitted by *Farsan khan (22522), Saud Akbar (22661), Shahzaib Ishaq (30041)* for the partial fulfillment of the requirements for the degree of the Bachelors of Science in Software Engineering (BSSE). It is our judgment that this report is of sufficient standard to warrant its acceptance by Riphah International University, Islamabad for the degree of Bachelors of Science in Software Engineering (BSSE).

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Declaration

We hereby declare that this document "**Job Explorer System"** neither as a whole nor as a part has been copied out from any source. It is further declared that we have done this project with the accompanied report entirely on the basis of our personal efforts, under the proficient guidance of our teachers especially our supervisor **Mr.Shahzad Ahmad khan**. If any part of the system is proved to be copied out from any source or found to be reproduction of any project from anywhere else, we shall stand by the consequences.

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Dedication

To our creator the one who deserves all unconditional praise and worship, the one who intends a thing to be, and it is, (Quran, 36:82) and to our loving and caring parents who have worked so hard to raise us, the friendships and the teachers who passed their wisdom onto us.

Acknowledgement

First of all, we are obliged to Allah Almighty the Merciful, the Beneficent and the source of all Knowledge, for granting us the courage and knowledge to complete this Project.

We are thankful for our amazing supervisor Mr.Shahzad Ahmad khan for guiding us in our project, the rest of the faculty members that made treading this difficult path easy for us and the senior students at our university who proved to be a guiding light for us.

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Abstract

The job Explorer system is an innovative a comprehensive platform design to change the job search process, providing job seekers with a complete solution to navigate the dynamic and competitive job market. In a swiftly changing professional environment with numerous job options, numerous individuals encounters difficulties in grasping the complexities of the employer market, recognized appropriate career routes, and skillfully showcasing themselves to prospective employers. The job explorer system improves the job search and experience by integrating cutting-edge technologies and user-friendly functionalities.

The job explorer system is an advance and inventive tools that aims to aid individuals in comprehending and navigating the complex realm of modern job opportunities. The system integrate advance technologies with intuitive functions, to assist user throughout process, facility well informed choice and enhance their prospects of finding employment.

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Chapter 1: Introduction

Chapter 1

INTRODUCTION

In today's rapidly changing job market, the task of finding suitable employment has become increasingly challenging for job seekers. The revolutionary job explorer system is a cutting-edge solution design to revolutionize and streamline the job search process. In a constantly evolving industrial landscape with emerging opportunities, individuals necessitate a refined profound recourse to navigate the complex journey of discovering carrier options and obtaining employment.

1.1   OPPORTUNITY & STAKEHOLDERS

1.1.1 Stakeholders

1) Admin
2) Students //optional
3) Job seeker
4) Employers

1.1.2 Opportunities

1) **Admin:**

Administering user accounts, roles, and access, ensuring job listing adherence and system maintenance validating employer registrations and managing concerns and tracking system activity to produce performance and engagement analytics.

2) **Student:**

Student can learn about many career option in the information (IT) business with the Job explorer system. Students can such as a system in the following ways. Explore Career option, Find-student friendly role, identify required skill.

3) **Job seeker :**

Job seeker obtain a major edge in their search by actively using a job explorer system. They can more successfully and smoothly seeks for a job if they can target, their search pinpoint areas that need work, and perhaps even interact with professional field.

4) Employers :

Job explore platforms, employers may identify talent pools, create retention strategies, access skill gaps, plan for succession, and enhance their brand. By utilizing these traits, employers can be improve personnel management, raise employ engagement, and untimely achieve their business goals.

1.2   MOTIVATIONS & CHALLENGES

1.2.1 Motivations:

Problem solving: system administrator are sometimes tasked with troubleshooting and addressing complex technology problems. For those who enjoys problem solving and critical thinking, this job can be highly rewarding.

High demand for skill: Expert system administrator are in highly demand as firms increasingly rely on technology. Demand might lead to a verity of job opportunities and Attractive compensation.

Career advancement: With greater experience and qualification, system administrations can advance in to more senior role such as a network administrator, IT managers, or specialist in specific technologies.

1.2.2 Challenges:

High responsibility: system administrator are mostly accountable for the dependency and security of an enterprises IT infrastructure, any problem are outages cloud have detrimental effects, necessitating a high standard of responsibility.

Security concern: system administrators must continue to be on the lookout for security precaution due to the rise in cyber-attacks. Maintaining system security requires constant work due to constantly changing security threat.

Communication challenges: Non-technical stakeholders must be informed about technical information system administrations. It can be difficult to communicate effectively, practically when attempting to explain complicated problems or solutions.

1.3   GOALS & OBJECTIVES

Goals: The core function of our system is to revolutionizing the way of connecting qualified job seekers with employers looking for open positions.

Objectives:

- Offer a user-friendly and automatic platform for both job seekers and employers.
- Install and maintain security measures.

Documentation and best practices:

Goals: implement efficient documentation procedures to enhance system support and administrator.

Objectives:

- Provide through documentation for system setups and operation, keep it up to date.
- Recommended to procedure for managing documentation and version control.
- Conduct routine reviews and updates of documentation.

1.4   SCOPE & LIMITATIONS

Scope:

A job explorer system offers in-depth detail on a wide range of professions in different industries, including job description, salary and necessary qualifications. These system also provide interactive exploration tools to assist user in evaluating their abilities and interests, matching them with appropriate vocations, and connecting them with pertinent training and educational resources.

Limitations:

The system data could not be entirely accurate and timely, necessitating more study on particular professions. It might provide scant information about workplace customs, company policies, and employment opportunities in the area. The system board approach could ignore developing or non-traditional fields in favors of standard career pathways, falling to make into consideration individual preferences, the need for a work-life balance.

1.5   SOLUTION OVERVIEW

A job explorer system is a web based tools that offers career development features to staff members and organizations, while simultaneously streamlining the job search process for Employers and job seekers. It serves as an important point for managing professional development, finding pertinent opportunities, and investigating career possibilities.

The key services provided by the system include:

Job search: Users of the systems can look for job openings according to a number of parameters, including region, industry, job title, and company size.

Career guidance: Users have access to resource including webinars, articles that provide tips for interview, career guidance, and insights into various industries and job opportunities.

Job application Tracking: Users can keep the organized during the job search process by using it to manage their job applications, including submission dates, follow up actions, and interview schedule.

Customized job Alerts: user can receive information about new job postings that meet their criteria by customizing their job alerts depending their preferences.

Interview preparation: It offer tool and advice to assists users and in getting ready for job interview, such as a sample question, interviewing strategies, and realistic interview Scenarios.

The system will cater to four types of users:

Admin:

The admin will have overall rights and privileges. Their tasks include:

- Handle users account creation, editing, and deletion.
- Track system efficiency and resolve problems.
- Manage the filters and job categories.
- If necessary, edit or remove already existing job advertisement.
- Career information (description, incomes, and skills) can be added, edit and deleted.
- Examine job listing and search trend among users.
- Allow job searchers to get alerts when new positions that fit their interest are posted.
- Keep job searchers in a professional and educational setting.

Student:

Students will have the following capabilities:

- Registration and login.
- Feedback and reviewers.
- Job search functionality
- Job application tracking.

- Company profiles and review.

- Interview perpetration.

- Skill development resource.

- Career assessment tool.

- Personalized recommendation.

- Salary information.

Job seeker:

Job seekers will have the following features:

- User profile creation.

- Job search functionality.

- Company research tool.

- Alerts Notification.

- Interview preparation resources.

Employers:

Employers will have the following features:

- Registration and login.

- Job posting.

- Company profile creation.

- Uploading progress reports for employs.

- Viewing their employs location.

- Managing offers.

- Confirming payment transactions.

- Uploading job for workers.

- Integration with HR system.

1.6   REPORT OUTLINE

1.6.1   Chapter 1: Introduction

In this chapter we look at the identified opportunities, stakeholders, motivations, challenges, goals, and objectives. It also provides the solution overview of what is to be implemented.

1.6.2   Chapter 2: Literature / Market Survey

In this chapter we focus on how the existing systems work, what functionality they provide and don't provide. Identification of the gap and what tools and methodologies we will be using in order to address these gaps.

Chapter 3: Requirement Engineering

This chapter will provide the functional and non-functional requirements, The elicitation techniques used to gather these requirements, and the defects detected through test case designs.

1.6.3   Chapter 4: System Design

This chapter will give an overview of the system architecture, the use cases and the detailed use cases, database design, activity and component diagrams, and Defect Detection through test case design.

Chapter 5: Implementation

This chapter has the WBS, Team responsibility and roles matrix, flow control diagrams, tools and technologies used, the coding standards implemented, and deployment of the environment along with defect detection (white box).

1.6.4   Chapter 6: Testing & Evaluation

In this chapter we will test all the functionalities to make sure that they give the expected outcomes against the carefully selected input. And also testing of the non-functional requirements.

1.6.5   Chapter 7: Conclusion & Outlook

This will give an overview of the whole project regarding the achievements and improvements made to the current techniques being implemented and the critical review + future recommendations/outlooks for the students who would later work on the same or similar nature of projects.

Chapter 2: Literature / Market Survey

Chapter 2

LITERATURE / MARKET SURVEY

2.1 INTRODUCTION

For a literature market study or survey for a job explorer system, research in conducted to find out about the most popular solutions, trends, user send, and preferences in the field of path exploration and job search platforms. A job explorer system may be developed or improved with the use of the survey result.

2.2 LITERATURE REVIEW / TECHNOLOGIES OVERVIEW

2.2.1 Historical Context

The concept of a "job explorer system" has expiration significant modification due to changes in labor markets, technological improvements, and how people look for and apply for employment. By identifying important technologies and trends that have influenced the development of job exploration system, this literature review seeks to give a board overview of the historical backdrop of these system.

2.2.2 Key Concepts and Theories

The key ideas and theories from the domains of information science, human-computer interaction, artificial intelligence, and labor economic have impacted the creation and development of job explorer system. The most significant ideas and theories that have influenced the layout, operation and efficiency of job exploration system will be discussed in this section.

2.2.3 Related Work

The development of job exploration system has been impacted by changes in the labor market, technological breakthroughs, and the evolving habits of job seekers. Modern techniques, methods, and practices in the field of job exploration system are well understood through a survey of the literature and an overview of the technologies. The purpose of this section is to locate and evaluate relevant research in this area.

2.2.4 Gap Identification

Following the completion of the technology overview and literature assessment on job exploration system, a number of gaps and areas require additional study and development

have been discovered.

Further research and development are required to address the changing needs and expectations of job seekers in the digital age. The gap in personalization and customization, skill-based matching, semantic job search, mobile job search apps in job exploration, and the integration of social media and online professional networks have been identified. It is anticipated the development AI machine learning and social media integration will spur innovation in job exploration system, offering job seekers more effective and customize option.

2.3   BRAINSTORMING

The digitalization of the labor market and technological improvements have brought about a substantial revolution in the way people explore work option. The field of job exploration system has changed as a result of the integration of natural language processing, systematic technologies. The purpose of this brainstorming part is to come up with creative solution and possible line of inquiry to fill in the holes in the technology overview and literature study of job exploration system.

2.4 EXISTING SYSTEM:

An established platform or collection of tool intended to make it easier for job searchers to explorer career prospects, connect with potential employers, and navigate the job market it referred to as an existing job exploration system. A verity of features and functionalities are usually available in these system to help users with different elements of their career developments and job search process. Job search functionality company profiles, job application administration tool are some of the essential element of an established job explorer system. These platform promise to make the job search process more efficient and provide tools to assists users developed their careers and improve their skill sets.

Table 2.1: Market Survey Table

Features	Platforms			
	Indeed	**Rozee.pk**	**Glass door**	**Bayrozgar.pk**
Document Verification	No	No	No	No
Interview Conduct	External	Internal	External	External
Visa Applications	No	No	No	No
Travel Arrangements	No	No	No	No
Language Proficiency Tests	No	No	No	No
Ensuring Compliance	No	No	No	No
Chabot for Websites	Yes	No	No	No
Application Tracking System	Yes	Yes	Yes	Yes
Payment Processing	No	No	No	No
User Support	Email, Phone, FAQ	Email, Phone, FAQ	Email, Phone, FAQ	Email, Phone, FAQ
User Registration	Email, Facebook, Google	Email	Email, Google, Facebook	Email, Facebook
Job Listing	Extensive	Extensive	Extensive	Extensive
Job Filtration	Advanced Filters	Advanced Filters	Advanced Filters	Advanced Filters
Matching Algorithms	Yes	Yes	Yes	Yes
Document Submission	Resume, Cover Letter	Resume, CV, Cover Letter	Resume, Cover Letter	Resume, Cover Letter

2.5 Summary:

The main purpose of a built-from technologies overview and literature analysis is to provide guidance for the creation, improvement, and development of job explorer system. Through integrating knowledge from previous research new technologies, platforms have the ability to.

- The objective is develop a user-friendly job explorer system that, by attending to the need and preferences of business and job seekers, fulfill both group needs.
- Keep up with technological advancements and market trends to add cutting-edge features that will increase the platforms effectiveness and competitiveness.

Chapter 3: Requirement Engineering

Chapter 3

REQUIREMENT ENGINEERING

3.1 INTRODUCTION

In this chapter we will go through the existing problems of the stakeholders and how we gathered the requirements along with what those requirements were (functional and non-functional).

3.2 PROBLEM SCENARIOS

In the following **Table 3.1**, **Table 3.2** you can see the problem statements for Rating System and Real-Time Updates respectively.

Table 3.1: Rating system Problem Statement

3.2.1 Problem Statement 1: Rating system	
The Problem	Due to outdated material and inappropriate adverts, which frequently lack transparency and provide to no indication of the genuine quality of a position, job seekers may experience dissatisfaction.
Affects	Admin, Students ,Job seeker, Employers
The result of which	- Modify your search strategies to get over barriers on job board. - Examine job posting closely to ensure correctness and relevancy. - Investigate several strategies inactive prospects.
Benefits of	- Increase Efficiency. - Improved job. - Greater transparency.

Table 3.2: Real-Time Updates Problem Statement

3.2.3 Problem Statement 3: Real-Time Updates	
The Problem	The Job Explorer System's lack of real-time updates causes information regarding job advertisements, company details, and application statuses to be delayed.
Affects	Admin.
The result of which	• A decline in user happiness and engagement. (Br> Ineffective hiring procedure because of out-of-date data. Consumers' lost possibilities.
Benefits of	• Improved user experience by providing accurate and timely information. • A rise in user happiness and engagement. (Br> - A smooth and effective job application procedure. (Br> Enhanced faithfulness and retention of users.

3.3   ELICITATION TECHNIQUES

3.3.1   Interview

We held multiple interviews with multiple stakeholders from which we confirmed our applicability of the idea. Basically, determining whether this idea is even feasible given the current conditions of the market.

The information regarding the interviews is given below in **Table 3.5**: -

Table 3.5: Interviews Conducted with Stakeholders

#	Date	Stakeholder Name	Stakeholder Position	Location	Outcomes	Align with goal
1	2 Apr, 2024	Mr. Sohaib	Employee	Rehmanabad, Rawalpindi	linkedIn.pk but with better security features keeping user data confidential, no language barrier	yes, since our idea was also about job listings, search and apply for their relevant
2	10 Apr, 2024	Mr. Awais	Employee	Satellite Town, Rawalpindi	Traditional way of posting job in newspaper and hired through referral	No Employers can create, edit, and manage job postings easily, with options to customize job descriptions, requirements, and application deadlines.

3.3.2 Brainstorming

Brainstorming helped us identify the gap in how other applications of the same nature don't have the functionality of a skill matching system that will play a crucial part.

3.3.3 Justification for Elicitation Techniques

All of the aforementioned elicitation techniques are justified as they help greatly in understanding the needs of the stakeholders and are confirmed with them to make sure that they will be provided with a solution that will be of relevance to them that will help them increase their productivity and profitability.

3.4   FUNCTIONAL REQUIREMENTS

3.4.1   Definition

They specify the functions a system is supposed to accomplish defined in terms of inputs, behavior, and outputs. Functional requirements specify particular results of a system, such as calculations, technical details, data manipulation, and processing. (IEEE)

3.4.2   System Functional Requirements

Table 3.6: System Functional Requirements

ID	Name	Description	Priority
001	User Registration	Allow users to create a new account	**High**
002	Job searching	Enable user to search for available jobs	**High**
003	Job posting	Allow to employers to post job vacancies	**High**
004	Job Alerts	Allow users to set up Jobs alerts	**Medium**

3.4.3   Admin Functional Requirements

Table 3.7: Admin Functional Requirements

ID	Name	Description	Priority
005	Registration	The admin should only have a single account.	**High**
007	User Management	Ability to approved, edit, and manage user account	**High**
008	Application Tracking	Ability to view and manage job applications	**High**
009	User feedback management	Collect and manage feedback from user	**Low**
010	Employers management	Ability to manage employers accounts and details	**Medium**

3.4.4   Employer and company features Functional Requirements

Table 3.8: Employer and company features Functional Requirements

ID	Name	Description	Priority
01	Employers registration	Allow employers to register and create account	**High**
02	Company profile management	Enable employers to post new job vacancies	**High**
03	Job posting	Allow to employers to post new job vacancies	**High**
04	Application tracking system	Enable employers to view and manage job applications	**High**
05	search and filter candidates	Allow employers to search and filter candidates based on skill, experience	**High**
06	Job posting analytics	Provide analytics on the performance job posting	**Medium**
07	Subscription management	Manage subscription plans and payments	**Medium**
08	Review and Rating system	Enable to employers to review and rate candidates	**Medium**

3.4.5   Job searching browsing Functional Requirements

Table 3.9: Job searching and browsing Functional Requirements

ID	Name	Description	Priority
01	Job search	Enable user to search for jobs using keywords, location.	**High**
02	Advanced search	Provide advanced search options with filters for better job matching	**High**
03	Company profiles	Enable user to view detailed company profiles and job listening	**High**
04	Job details	Provide detailed job description including responsibilities, qualifications.	**High**
05	Apply for jobs	Allow user to apply for jobs directly through the portal	**High**
06	Job Alerts	Allow user to set up job alerts for a new job posting	**Medium**

3.4.6   Application management Functional Requirements

Table 3.10: Application management Functional Requirements

ID	Name	Description	Priority
01	Application submission	Enable users to submit to their application for job vacancies	**High**
02	Application Tracking	Allow user to track the status for their job applications	**High**
03	Interview scheduling	Allow applicant to schedule and manage interviews	**High**
04	Feedback and Notifications	Provide feedback and notifications on application status and updates	**High**
05	Applications Analytics	Provides analytics on the performance and status for job applications	**Medium**
06	Duplicate Application Check	Allow user to follow up on their application with employers	**Low**

3.5   NON-FUNCTIONAL REQUIREMENTS

3.5.1   Definition

NFR's (also called performance or quality requirements) specify constraints on the design or implementation, such as performance requirements, timing constraints, security, cost, energy consumption, lifetime, or reliability. (IEEE)

3.6   SQA ACTIVITIES: DEFECT DETECTION

3.6.1   Test Case Design

3.6.1.1   Admin Test Cases

3.6.1.1.1 Manage User

3.6.1.1.1.1 (Positive Test Case) Valid Scenarios:

Table 3.11: Manage User Positive Test Case

T.C ID	Test Case Description	Preconditions	To Steps	Actual Result
1	Add a new user	The user has logged into the job explore system. The user has the necessary permission.	1. Go to the "manage users". Area. (Br> 2. Press the "add new user" icon. (Br> 3. Complete the user profile. (Br> 4. Select the "save "option.	There was a successes message displayed. A new user is added to the user list.
2	Edit User Details	The user has logged in to the system known as job Explorer. The user process the required authorization. -there is one or more users present.	2. Go to the "manage user "area. 3. (Br>2.choose a person. 4. (Br>3.select the "Edit "option. 5. (Br>4. Adjust the specifics. 6. (Br>5. Select the "save "option.	A succeed message appeared. (Br>-user information is updated in the list.

3	Reset user password	The user has logged on the job explore system. The user has the necessary permission. One or more user in attendance.	1. Go to the "Manage user" area. 2. (Br>2.choose. 3. (Br>a person. (Br>3.select the option to "reset password". 4. (Br>4. Type in a fresh password. 5. (Br>5. Select the "save" option.	A message indicating success was displayed. To log in, you can use a new password
4	Delete user	The User has log in to the system known as job explorer. The user process the required authorization. -there is one or more user present.	1. Go to the "manage users" area 2. . (Br>2.choose a person 3. (Br>3.select the "delete" option. 4. (Br>4 verify the deletion.	There was a successes message displayed. In the user list, the deleted user is no longer visible.
5	Assign role to user	The user has logged in to the system known as job explorer system. The user processes the required authorization. There is a minimum of one user and one job in place.	1. Go to the "manage user" area. 2. (Br>2. Choose a person. 3. (Br>3.press the "assign role"	There was a successes message displayed. The allocated role appears next to the

			icon. 4. (Br>4. Decide on a role. (Br>5. Select the "save" option.	user detail in the user list.

3.6.1.1.1.2 (Negative Test Cases) Invalid Scenarios:

Table 3.12: Manage User Negative Test Case

T.C ID	Test Case Description	Precondition	Test steps	Expected result
1	Add user with Existing username	The user has logged in to the job explorer system. The user has the necessary permission. -that username is already in use by someone.	1 Go to the "manage user" area. (Br>2.press the "add new user" icon. (Br>3. Make use of an already-existing login. (Br>4.complete the user information. (Br>5. Select the "save" option.	There was an error warning showing that there was more than one username. - there is no new user added to the system.
2	Editing User with Invalid Details	The user has successfully logged into the job explorer system. The user has the necessary permission. - one or more users are in attendance.	1 Go to the "manage user" area. (Br>2. Choose a person. (Br>3.select the "edit" option. (Br>4. Alter information by adding erroneous data (such as blank fields). (Br>5. Select the "save" option.	An error message indicating invalid data was presented. (Br>-user information is unchanged.

3.6.1.2 Authentication Test Cases

3.6.1.1.2 Signup/Register

3.6.1.1.2.1 (Positive Test Case) Valid Scenarios:

Table 3.13: Valid Scenarios Positive Test Case

T.C ID	Test Case Description	precondition	Test steps	Expected Result
1	User Registration	The signup page has now been visited by the user. Now two people share a username or email address.	Go to the registration first. (Br>2. Provide accurate user information. (br>3 press the "Register" icon	A successes message appeared. after registering, the user is taken to the login page

3.6.1.1.2.2 (Negative Test Cases) Invalid Scenarios:

Table 3.14: Valid Scenarios Negative Test Case

T.C ID	Test Case Description	Precondition	Test steps	Expected result
1	User Registration- duplicate email	Go to the registration page. The user who has the same email address already exist.	1. Go to the registration page first. 2. (Br>2. Type in an identical email. 3. (Br>3"Press the "register" icon.	An error notice indicting a duplicate Email was displayed. -the user is not signed.

3.6.1.1.3 Sign in/Login.

3.6.1.1.3.1 (Positive Test Case) Valid Scenarios:

Table 3.15: Sign in/Login Positive Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Valid Login	The user will provide the login credentials and login to the system.	The system will verify the credentials and allow the user to Login.	User should be successfully logged in and redirected to the portal's dashboard or homepage.

3.6.1.1.3.2 (Negative Test Cases) Invalid Scenarios:

Table 3.16: Sign in/Login Negative Test Case

T.C ID	Test Case Description	Preconditions	To Steps	Expected Result
1	Invalid login	The user account exist.	The system will show the error and ask to provide the correct credentials.	Show an error message stating that the password or username is not right.

3.6.1.1.3.3 Create New Role

3.6.1.1.3.4 (Positive Test Case) Valid Scenarios:

Table 3.17: Create New Role Positive Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Create new Role successfully	User is login administration.	1. Go to the admin dashboard's 'Roles' section. (Br> 2. Select 'Create New Role' from the menu. (Br> 3. Complete the new role's required fields.	The new role is created successfully, and success the message.

3.6.1.1.3.5 (Negative Test Cases) Invalid Scenarios:

Table 3.18: Create New Role Negative Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Maximum roles already created	User is logged is an administrator.	1. Go to the admin dashboard's 'Roles' section. (Br> 2. Select 'Create New Role' from the menu. (Br> 3. Type an already-existing role name.	Display an error message indicating that the roles name already exist.

3.6.1.3 Dashboard Test Cases

3.6.1.1.4   View Profile

3.6.1.1.4.1 (Positive Test Case) Valid Scenarios:

Table 3.19: View Profile Positive Test Case

T.C ID	Test Case Description	Precondition	To steps	Expected Result
1	Viewing User Profile	User is logged in.	1. Go to the user dashboard's 'Profile' section. (Br> 2. Select 'View Profile' from the menu.	The user's profile details are displayed correctly on the screen.

3.6.1.1.4.2 (Negative Test Cases) Invalid Scenarios:

Table 3.20: View Profile Negative Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	View profile without logging in	User is not logged in	1. Open the user dashboard and find the 'Profile' section. Instead, 2. Press the 'View Profile' button.	Take the user to the login page and inform them that they need to log in in order to view the profile.

3.6.1.1.5   View Dashboard

3.6.1.1.5.1   (Positive Test Case) Valid Scenarios:

Table 3.21: View Dashboard Positive Test Case Scenario

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Correct User Credentials	Log in with valid user credentials.	1. Go to the user dashboard and select the 'Dashboard' section. (br> 2. Select 'View Dashboard' from the menu.	The user's dashboard is displayed correctly.

3.6.1.1.5.2   (Negative Test Cases) Invalid Scenarios:

Table 3.22: View Dashboard Negative Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	View dashboard without logging in	User is not login	1. Open the user dashboard and navigate to the 'Dashboard' area. Instead, Select the 'View Dashboard' button.	The user that they must log in in order to view the dashboard as you redirect them to the login page.
2	View Dashboard with Insufficient Authorization	User is logged in	1. Go to the user dashboard and select the 'Dashboard' section. (Br> 2. 2. Attempt to use an admin-only function.	Error message indicating that the user does not have permission to view the dashboard.

3.6.1.2   Company Test Cases

3.6.1.2.1   Register Company:

3.6.1.2.1.1 (Positive Test Case) Valid Scenarios:

Table 3.23: Register Company Positive Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Register company successfully	User is logged in as administrator	Navigate to the admin dashboard's 'Companies' section. (br> 2. Press the 'Register New Company' icon. (br> 3. Complete the new company's required information.	The new company is registered successfully, and a success message is displayed.
2	Accessing company details successfully	Company is registered	Navigate to the admin dashboard's 'Companies' section. (br> 2. Select the registered firm by clicking the 'View Details' button next to it.	The details of the registered company are displayed correctly on the screen.

3.6.1.2.1.2 (Negative Test Cases) Invalid Scenarios:

Table 3.24: Register Company Negative Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Register company with Existing company name	Company with the same name exists.	Navigate to the admin dashboard's 'Companies' section. (br> 2. Press the 'Register New Company' icon. (br> 3. Enter an existing company name.	Display an error message indicating that a company with the same name already exists.

3.6.1.2.2 Review Companies:

3.6.1.2.2.1 (Positive Test Case) Valid Scenarios:

Table 3.25: Review companies Positive Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Review companies successfully	User logged is an administrator	Navigate to the admin dashboard's 'Companies' section. (br> 2. Select 'Review Companies' from the menu.	The list of registered companies is displayed correctly on the screen.
2	Accessing company details successfully	Company is registered	Navigate to the admin dashboard's 'Companies' section. (br> 2. Select a registered firm by clicking the 'View Details' button next to it.	The details of the selected company are displayed correctly on the screen.

3.6.1.2.2.2 (Negative Test Cases) Invalid Scenarios:

Table 3.26: Review Companies Negative Test Case

T.C ID	Test Case Description	Preconditions	To steps	Expected Result
1	Review Companies Without Logging In	User is not logged in	Navigate to the admin dashboard's 'Companies' section. (br> 2. Select 'Review Companies' from the menu.	Redirect the user to the login page with a message indicating that they need to log in to review companies.