A picture containing text, clipart

Description automatically generated

**Formative Assignment 1**

|  |  |
| --- | --- |
| Module Name | Application Implementation (Agile Project Management) |
| Course Name | Bachelor of Technology in Software Engineering |
| Assignment Title | Project Management Plan for implementing the community portal |

|  |  |
| --- | --- |
| Learner Name | Francis Roel L. Abarca – bdse-0922-113 |

|  |
| --- |
| Learner declaration |
| I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.  Student signature: Date: 7/18/2023 |

## Purpose of this assignment

To demonstrate your capabilities in the following areas:

* Preparing Requirement Specifications
* Developing Project Plan

## Submission Format

The submission is in the form of an individual written report with examples and illustrations. This should be written in a concise, formal academic style using single spacing and font size 12.You are required to make use of headings, paragraphs, and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system.

## Submission file

Submission File Name format: Cohort Code \_Full Name\_Assignment Number

E.g.: AIM-1222A\_AliceTan\_A1.docx

## Scenario

## You have been approached by ‘ABC Jobs Pte Ltd’ as a website developer to develop a community portal for Software Developers. For this module the scope is to Design, Develop, Implement & Document the data-driven website using the framework Spring boot and react.

The Scope of the Project is to design a Community Portal Similar to Linkedin.com. Users will be able to register in the portal using the Registration Page. Users of the portal can search for other users using various parameters such as First Name, Last Name, Company Name, City & Country. Users will be able to view the Public Profile of users after searching them. The portal allow users to login, request for forgotten password and Update their profile information.

The overview of the project is as below

There are 2 types of users in this Community portal. They are

1. Software Programmer
2. Administrator

## Software Programmer should be able to perform following functions in the portal

## 1. Allow the programmers to register in the portal, show a thank you page & send a registration confirmation email.

## 2. Search & Find Other Programmers after login and view their profile.

## 3. Provide Login Page

## 4. Provide password retrieval functionality.

## 5. Update their Profile after logging in.

## Following Functionality is part of Database Design & Will be enhanced as features as required in the Capstone Project, Depending on time availability.

## 6. Send Messages to Each Other on the Portal

## 7. Create Threads & Post Replies to a Thread

## 8. Post Job Opportunities in the Portal

## Administrator should be able to perform following functions in the portal

## 1. Administer user data.

## 2. Send bulk email inviting programmers to register on the community portal

## The portal consist of the following Key pages (For Reference)

## 1. Community Portal Home Page

## 2. Registration Page

## 3. Registration Confirmation Page

## 4. Update Profile Page

## 5. Search Users Page

## 6. List Search Results

## 7. Public Profile Page

## 8. Registration Confirmation Email

## 9. Login Page

## 10. Forget Password Page

## 11. Design the Forget Password Confirmation Page

## Following Functionality is part of Database Design & Will be enhanced as features as required in the Capstone Project, Depending on time availability.

## 

## 12. Send Messages

## 13. Read Messages

## 14. Post in Message Board

## 15. List Message Board

## 16. Read A Thread

## 17. Post Job Opportunities

## 18. List Job Opportunities & Responses

## You will be required to:

* Write a brief requirement specification for the Community Portal.
* Prepare the detailed project plan to implement the Community Portal

## Evidence to exhibit

* Requirements Specification
* Project Plan

Task Wise Solutions:

1. **Write a brief requirement specification for the Community Portal.**
   1. **Functional Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Requirements** | **Web Page / Process** | **Field Detail** |
| 1 | Register on the portal | Registration Page | First Name, Last name, Email address, Password, Company Name, City, Country |
| 2 | Receive a Confirmation Email | Registration Confirmation Page | Email Address |
| 3 | View a Thank You Page | Registration Confirmation Page | None |
| 4 | Search for other Software Engineers | Search Users Page | First Name, Last Name, Company Name, City, Country |
| 5 | View the Public Profile of other Software Engineers | Public Profile Page | First name, Last Name, Company Name, City, Country, Skills, Experience, Education |
| 6 | Log in to the portal | Login Page | Email address, password |
| 7 | Reset forgotten passwords | Forgot Password Page | Email Address |
| 8 | Update their profile information after logging in | Update Profile Page | First name, Last Name, Company Name, City, Country, Skills, Experience, Education |

* 1. **Non-Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **No** | **Requirements** | **Purpose** |
| 1 | Accessibility | Ensure all users have equal access to the system. |
| 2 | Security | Protect user data from unauthorized access, disclosure, modification, or destruction. |
| 3 | Reliability | Ensure that users can access the system whenever they need to. |
| 4 | Navigation | Ensure that users can easily find the information and features they need. |
| 5 | Scalability | Ensure the system can handle an increasing number of users and transactions. |

* 1. **Technical Requirements**
     1. **Hardware (Minimum)**  
        CPU: Any x86 CPU with 2 cores  
        RAM: 4GB  
        Storage: 40GB SSD
     2. **Software (Minimum)**Operating System: Windows 10 or Linux  
        Database: MySQL 8.0  
        Web Server: Apache Tomcat 9  
        Java Version: Java 11.0.8
     3. **Database**A diagram of a flowchart

        Description automatically generated

1. **Project Plan**
2. **Design Phase**
   * During this phase, the design of the Community Portal will be finalized. This includes creating wireframes and mock-ups for each page of the website, as well as finalizing the layout and user interface. The design team will work closely with the development team to ensure that the design is feasible and can be implemented using the chosen tech stack (ReactJS, Bootstrap, Spring Boot, MySQL).
3. **Development Phase**

* During this phase, the website will be developed using the ReactJS, Bootstrap, Spring Boot, MySQL tech stack. The development team will work on implementing the functionality outlined in the requirement specification, including user registration, search, profile management, and administrator functions. The development team will also work on integrating the website with a MySQL database to store data.

1. **Testing Phase**

* During this phase, the website will be tested to ensure that all functionality is working as intended. This includes conducting unit tests, integration tests and user acceptance tests.

1. **Implementation Phase**

* During this phase, the website will be deployed and made available to users. This includes setting up hosting and configuring the website on a server. The implementation team will also conduct final tests to ensure that the website is functioning correctly after deployment.

1. **Documentation Phase**

* During this phase, the documentation for the website is created. This includes creating user manuals to help end-users understand how to use the website, as well as technical documentation for future maintenance and development.