**Project Report**

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| **Product Name** | Applied Degree in Software Engineering |
| **Qualification Name (NICF)** | Applied Degree in Software Engineering |
| **Product Name** | Design, develop and test the Community portal website |
| **Module Name (NICF)** | NICF-Application Implementation |

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| --- | --- | --- | --- |
|  | | **Assessor name** | |
|  | |  | |
| **Date issued** | **Completion date** | | **Submitted on** |
|  |  | |  |
|  | |  | |
| **Project title** | Design, develop and test the Community portal website | | |

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

**AIM Project report**

**Content**

1. Project Background
2. Project Objective
3. Project Scope
4. Tools and Platform
5. Task 1
6. Task 2
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8. Task 4
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11. Task 7
12. **Project Background**

ABC Jobs Pte Ltd as a website developer to develop a community portal for Software Developers.

**Project Objectives**

1. **Project Scope**

3.1 Features to Be Tested

1. Registration

3.2 Features Not to Be Tested

1. Post Job

3.3 Deliverables

1. **Tools and Platform**
2. **Task 1 : : Write a brief requirement specification for the Community Portal.**
3. Functional Requirements

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| --- | --- | --- | --- |
| No | Requirements | Web Page / Process | Field detail |
| 1 | Users can register their data on the register page | Registration | Logo, text fields, hyperlink, button, copyright |
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1. Non-Functional Requirements

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| --- | --- | --- |
| No | Requirements | Purpose |
| 1 | Performance |  |
| 2 | Availability |  |
| 3 | Security aspects |  |
| 5 | Database backup |  |
|  |  |  |

1. Technical requirements

Hardware

Software

Database

* This requirement will consist of entity identification and entity relationships.

**Task Statement : Justify the chosen SDLC methodology with pro and cons**

**Project Plan**

Gantt Table

Gantt Chart

1. **Task 2 : Briefly explain different types of testing, how they will help to create a better system**

**Task Statement : Explain the benefits of 4 testing methods under functional and non-functional category**

1. **Task3 Propose relevant tests suitable for the Project Scenario**

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| **1.  Functional Testing - UAT test cases** | | |  |  |
| **Test Id** | **Test Scenario** | **Test Objective** | **Technique** | **Expected Result** |
| 1 | TS001 | Identify whether user can login to the portal with registered credentials. | Functional Testing | Upon attempt of authentication, users will be authenticated to the portal and given authorization of member or user as default. |
| 2 | TS002 | Identify whether user can successfully register or Not | Functional Testing | Upon registration, they will be able to use the registered credentials to authenticate to the User to System |
| 3 | TS003 | Identify whether user can successfully add result | Functional Testing | Upon authentication, users will be able to Add Result details. |
| 4 | TS004 |  |  |  |
| 5 | TS005 |  |  |  |

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| **2.  Compatibility - Cross-browser testing / responsiveness** | | | |  |
| **Test Id** | **Test Scenario** | **Test Objective** | **Technique** | **Expected Result** |
| 6 | TS006 | Identify if the Result portal works as intended on Google Chrome. | Cross- browser Testing | The look and feel are working as intended on Google Chrome. |
| 7 | TS007 | Identify if the Result portal works as intended on Microsoft Edge. | Cross- browser Testing | The look and feel are working as intended on Microsoft Edge. |
| 8 | TS008 | Identify if the result portal works as intended on Mozilla Firefox. | Cross- browser Testing | The look and feel are working as intended on Mozilla Firefox. |

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| **3. Performance Efficiency - Load Testing/ Stress testing** | | | |  |
| **Test Id** | **Test Scenario** | **Test Objective** | **Technique** | **Expected Result** |
| 9 | TS009 | Identify if index load time is within 10 – 15 | Performance Testing | The index page will load in less than 15 seconds |
| second mark |

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| --- | --- | --- | --- | --- |
| 6.  Portability - Multi platforms (different platforms, different devices) | | | | |
| **Test Id** | **Test Scenario** | **Test Objective** | **Technique** | **Expected Result** |
| 14 | TS014 | Identify whether the portal functionality works as intended using various platforms and devices. | Portability Testing | The portal should have a responsive look and feel which scales down to mobile view. |

1. **Task 4 : Optimal Scheduling**

**Task Statement : Identify appropriate method to compute the testing schedule duration and prepare the test schedule**

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| **Web page** | **Weighting** | **Functional Points (FP)** | **Total** |
| Registration | 3 | 5 | 15 |
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|  |  | Total functional points |  |
|  |  | Estimated person hour per FP |  |
|  |  | Total hours needed |  |
|  |  | Total days needed |  |

Test Schedule :

|  |  |  |  |
| --- | --- | --- | --- |
| Test Schedule ID : |  |  |  |
| Product ID / Name : |  |  |  |
| Product Version or Build : |  |  |  |
| Present Owner : |  |  |  |
| Created On : |  |  |  |
| Review On : |  |  |  |
| Review By : |  | QA Manager |  |
| Review Comments : |  |  |  |
| Current Version : |  |  |  |
| Change Details : |  |  |  |
| Current Status : |  |  |  |
| Signing Off Authority : |  |  |  |

1. **Task 5:** **Phase Test Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Task | Start | End | Person Days | Resource |
| 1 | Prepare Test Plan |  |  |  |  |
| 2 | Define metrics |  |  |  |  |
| 3 | Review plan |  |  |  |  |
| 4 | Prepare Test Scripts |  |  |  |  |
| 5 | Review Test Scripts |  |  |  |  |
| 6 | Set up Test Environment |  |  |  |  |
| 7 | Execute Testing/Record Faults |  |  |  |  |
| 8 | Re-execute Test as Needed |  |  |  |  |
| 9 | Document the test results |  |  |  |  |
| 10 | Review Document |  |  |  |  |

1. **Task 6 : UNIT and UAT Test Scripts**

**Task Statement : Prepare the test scripts with use case, scenario, test description, pre-conditions, test data, and expected output**

Test Scenario :

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| Requirements | Test Scenario ID | Test Scenario | Number of test cases |
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Scenario 1 : Unit Testing

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| Test Scenario | Ensure that user enters correct data in the registration page |
| TS001 |
| Test Cases |  |
| TC001 |  |
| TC002 |  |
| TC003 |  |
| TC004 |  |
| **TC005** |  |

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| **1.  Functional Testing - UAT test cases** | | |  |  |  |  |
| **TestNo** | **Test Scenario** | **Test Objective** | **Test Priority** | **Risk** | **Technique** | **Expected Result** |
| 1 | TS001 | Identify whether user can login to the portal with registered credentials. | High | Users will not be able to login and use the main functionality of the portal | Functional Testing | Upon attempt of authentication, users will be authenticated to the portal and given authorization of member or user as default. |
| 2 | TS002 | Identify whether user can successfully | High | User is unable to register to the platform | Functional Testing | Upon registration, they will be able to use the registered credentials to |
| register or | which halts | authenticate to the |

Test Cases :

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Scenario ID** | **Test Case ID** | **Test Case** | **Preconditions** | **Test Step** | **Test Data** | **Expected Results** | **Actual Results** | **Pass / Fail** |
| TS001 |  |  |  |  |  |  |  |  |
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**TC001**

Scenario 2 : UAT Testing

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