

**Test Plan**

**Project: Certification Portal**

Name: Sahil Kumar

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* **Introduction: -**

A certificate portal is a web-based application that allows users to request, manage and verify digital certificates for various purposes. The certificate portal allows us to download certificate related to student courses. In this, we can also insert multiple data in each module to create multiple certificates and test each module which is required to create certificate. The URL of the website is [https://www.solitaireinfosystems.com/certificate2/](test%20plan.docx)

* **Objectives and Tasks: -**

A test plan is a document that describes the test strategy, objectives, schedule, estimation and deliverables, and resources required for testing a software product. A test plan helps to ensure the quality, reliability and maturity of the software.

**Test Methodology:** This section describes the test approach, test levels, test types, test techniques, bug triage, suspension and resumption criteria, and test completeness criteria.

**Test Deliverables:** This section lists the test artifacts that will be produced and delivered during the testing process, such as test cases, test data, test results, test reports, defect logs, etc.

**Resource and Environment Needs:** This section specifies the testing tools, test environment, hardware and software requirements, and personnel requirements for the testing activities.

* **Scope: -**

It defines the features, functions, and requirements of the software that will be tested and not tested. The scope also specifies the boundaries and limitations of the testing process, such as the test environment, test data, test tools, test resources, and test schedule. The scope helps to ensure that the testing activities are aligned with the project objectives and expectations, and that the test coverage is suitable and complete.

The type of testing we perform on this portal is manual testing, in which we performs the:-

* Functional testing
* Performance testing
* Security testing
* Usability testing
* **Inclusions: -**

1. Login
2. Profile
3. Sessions
4. Courses
5. Colleges
6. Trainers
7. Batches
8. Students Confirmation
9. Student Certification

* **Test Environment: -** The screen sizes and devices types for testing such as computer’s desktop screen, laptop, tablet and smartphones.

1. Laptops/Computers: - Windows7/10/11 (Chrome, Edge, Brave, Firefox etc).
2. Android: - Any android OS (Chrome, Edge, Firefox, etc).
3. Mac/iPhone: - IOS (safari).
4. Internet connection: - cellular, Ethernet, WIFI.

* **Exclusion: -**

1. User Profile
2. Dashboard module
3. Automation testing
4. Logo

* **Test strategy: -** Various functional testing is done during test strategy.
* First, we will conduct smoke testing to see if the various and important functionalities of the website are working.
* We reject the build, if the Smoke Testing fails and will wait for the stable build before performing in depth testing of their functionalities.
* Once we receive a stable build, which passes Smoke Testing, we perform in depth testing using the test cases created.

**we will perform the below types of Testing:**

* Smoke Testing and Sanity Testing
* Regression Testing and Retesting

The non-functional testing held during the website testing are:

* Usability Testing
* Functionality
* UI Testing

## Defect reporting procedure: -

When testing is executing then if:

Any incorrect human action that produces a problem in system is count as Error that is reported as issue.

Deviation from expected behavior to actual behavior is count as defect or bug occur in system.

After finding a defect in software, it will retest again so that how much it eﬀects the software. We will make proper excel sheet of the defect with screenshots so that we can resolve that later.

We can test the website based on the requirement of the client with the help of test plan, test cases and test scenario.

After finding any bug, defect or error we can make excel sheet with diﬀerent test cases, test scenario, bugs list and screen shots etc.

If any bug/defect found then we follow these steps:

* A new defect is identified by the tester in the software.
* Defects will be approved and is assigned to the development team to resolve.
* Next the developer team works on the defects for fixing the bugs and resolve those bugs.
* After fixing the bug, the developer team passes the new code to the testing team for retesting.
* The tester team starts retesting to check whether the defect is fixed or not.
* After ‘Retesting’ if the tester team found that the bug continues like previous even after the developer team has fixed the bug then the whole process repeats again and again.
* If the tester does not find any kind of defect/bug then the bug is fixed.

## Roles/Responsibilities:

|  |  |  |
| --- | --- | --- |
| **Name** | **Roles** | **Responsibilities** |
| Kapil | Test manager | * Manage the team |
| Akshay | Test lead | * Create the test plan * Report defect * Attend any meeting with client * Coordinate with test execution * Submit daily issue update * Interact with the application, create and   execute the test case |
| Harish | Senior test engineer | * Interact with the application * Create and execute the test case * Report defect |
| Abhey | Test engineer | * Interact with the application * Execute the test case * Report defect |

* **Test schedule**

Following is test schedule for the project:

**Time duration**

**Task**

|  |  |
| --- | --- |
| Creating test plan |  |
| Test case creation |  |
| Test case execution |  |
| Summary report submission |  |

## Test deliverables

Following are the test deliverables to the client:

|  |  |  |
| --- | --- | --- |
| **Deliverables** | **Description** | **Target date completed** |
| Test plan | Details on scope of project, test strategy, test schedule, test deliverables and test  environment |  |
| Functional test cases | Test cases created for defined inclusion in scope |  |
| Defect report | Detailed description of defects identified along with screenshot |  |
| Summary report | Summary report: Bugs by bug  Bugs by functional area Bugs by priority |  |

## Pricing:

N/A

## Entry and Exit criteria

### **Requirement Analysis**

**Entry criteria:** Once the testing team make or receives the Requirements Documents that is SRS from the client or details about the Project.

Exit criteria:

* SRS document is explored and understood by the testing team.
* Doubts are cleared.

### **Test Execution:**

Entry Criteria:

* Test Scenarios and Test Cases Documents are signed-oﬀ by the Client.
* Application is ready for Testing.

Exit Criteria:

* Test Case Reports, Defect Reports are ready.

### **Test Closure:**

Entry Criteria:

* Test case Reports, Defects Reports are ready.

Exit Criteria:

* Test summary reports.

# **Suspension and Resumption Criteria:**

Suspension team is used to stop the testing at any condition or circumstances while resumption specify when testing can resume after it has been stopped.

* When a defect is introduced that cannot allow any further testing.
* Critical path deadline is missed so that the client will not accept delivery even if all testing is completed.
* A specific holiday shuts down both development and testing.

Suspension resumed under the following circumstances:

* When the external dependent systems become available again.
* When a fixing of a bug is successfully implemented and the Testing Team is notified to continue testing.

## Tools:

The following are the list of Tools we will be using in this Project:

* JIRA Bug Tracking Tool.
* Snipping Screenshot Tool.
* Word and Excel documents.

# **Risks and Mitigation:**

The following are the list of risks possible and the ways to mitigate them:

Risk: Non-Availability of a Resource. Mitigation: Backup Resource Planning.

Risk: Build application link is not working. Mitigation: Resources will work on other tasks.

Risk: Less time for Testing.

Mitigation: Ramp up the resources based on the Client needs dynamically.

# **Approvals:**

Team will send diﬀerent types of documents for Client, supervisor, managers and team leader approval like below:

* Test Plan
* Test Scenarios