TEST PLAN

Project Name: Sentra Enterprise

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1. Test Plan Identifier:

Sentra Enterprise TP01

2. References:

NybSys

3. Introduction:

This is the Test Plan for the Sentra Enterprise Admin Panel. This plan will address only those items and elements that are related to the the Sentra Enterprise Admin Panel, both directly and indirectly affected elements will be addressed. The primary focus of this plan is to ensure that the Sentra Enterprise Admin Panel provides the same level of information and detail as the current system while allowing for improvements and increases in data acquisition and the level of details available.

The project will have both manual and automation test. Load test and stress testing using JMeter and Postman automation scripts are also validated here.The details for each level are addressed in the approach section and will be further defined in the level-specific plans.

4. Feature To Be Tested:

- Login
- Logout
- Add a user
- Remove a user
- View user

5. Feature Not To Be Tested:

Other than the above

6. Approach:

6.1: Testing Level:

The testing for Sentra Enterprise Admin Panel will consist of Manual, automation with using Selenium With Maven and Junit, Stress and load testing using JMeter and API testing using Postman.

Manual testing will be performed. No specific test tools are available for this

Automation testing will be performed with Selenium. Preferable language Java. Maven is using here for standardized and easy-to-use project structure. JUnit is using here to structure the test and perform assertions.

Load and stress testing will be performed by using JMeter.

API testing will be performed by using Postman.

6.2: Test Tool:

- Microsoft Excel will be used to write test cases and manage bug report
- IntelliJ IDEA will be used for Selenium framework
- JMeter will be used for stress and load testing
- Postman will be used for API testing

6.3: Meetings:

The test team will meet once every two weeks to evaluate progress to date and to identify error trends and problems as early as possible.

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7. Item Pass/Fail Criteria:

If the website is accepted by the tester and the users, if they are satisfied with the performance then the website will pass, otherwise, it will fail and have to check the software again.

8. Test Deliverables:

The following are to be delivered to the client:

- Allure Report
- Test Cases
- Test Report
- HTML report for postman
- JMeter HTML dashboard report

9. Remaining Test Tasks:

Task	Assigned to	Status
Create Test Plan	TM, PM, Client	
Create Test Plan	TM, PM, QA	
Create Test Cases	TM, PM, Client	
Create Reports	TM, PM, Client	

10. Environment Coverage:

Browser compatibility (Cross-Browser testing): we cover different types of browsers for the verify browser

Compatibility, including the following:

Windows 10 – Chrome, Opera, Edge

Android Mobile OS – Chrome, Opera

9. Testing Schedules:

Iteration (Or) Build No	Start Date	End Date
Iteration#1(Build#1)	22-Dec-2023	24-Dec-2023
Iteration#2 (Build#2)	Middle of July	?
Iteration#3 (Build#3)	Middle of December	?

9. Testing Strategy:

As part Testing, we will follow the below approach for Testing:

Step1 – Creation of Test Scenarios and Test Cases for the different features in scope.

- We will apply several Test Designing techniques while creating Test Cases
  - Equivalence Class Partition
  - Boundary Value Analysis
  - Decision Table Testing
- We also use our expertise in creating Test Cases by applying the below:
  - Error Guessing
  - Exploratory Testing
- We prioritise the Test Cases

Step2 – Our Testing process, when we get an Application for Testing:

- Firstly, we will perform Smoke Testing to check whether the different and important functionalities of the application are working.
- We reject the build, if the Smoke Testing fails and will wait for the stable build before performing in depth testing of the application functionalities.
- Once we receive a stable build, which passes Smoke Testing, we perform in depth testing using the Test Cases created.

- Multiple Test Resources will be testing the same Application on Multiple Supported Environments simultaneously.
- We then report the bugs in the 'Microsoft Excel' and send you the defect found on that day in a status end of the day email.
- As part of the Testing, we will perform the below types of Testing:
    - Smoke Testing and Sanity Testing
    - Load and stress
    - Regression Testing
    - Usability Testing
    - UI Testing
    - Compatibility Testing
    - End to end testing
- We repeat Test Cycles until we get the quality product.

Step3 – We will follow the below best practices to make our Testing better:

- Context Driven Testing – We will be performing Testing as per the context of the given application.
- Shift Left Testing – We will start testing from the beginning stages of the development itself, instead of waiting for the stable build.
- Exploratory Testing –We will perform Exploratory Testing, apart from the normal execution of the Test cases.
- End to End Flow Testing – We will test the end-to-end scenario which involve multiple functionalities to simulate the end user flows.

10. Roles/Responsibilities

Name	Role	Responsibilities
Shatabdy	Test Manager	✓ Escalations
Tasnim	Test Lead	✓ Create the Test Plan and get the client signoffs ✓ Interact with the application, create and execute the test cases ✓ Report defects ✓ Perform automation testing. ✓ Perform load and stress testing ✓ Submit daily issue updates and summary defect reports to the client. ✓ Attend any meeting with client.
Md. Rezvee	Senior Test Engineer	✓ Interact with the application ✓ Create and Execute the Test cases. ✓ Report defects
Bulbul Ahmed	Test Engineer	✓ Interact with the application ✓ Execute the Test cases. ✓ Report defects

11. Risks and Mitigations:

Sl No	Risk	Mitigation
1	Non-Availability of a Resource	Backup Resource Planning
2	Hardware failure during testing	Make ready it them, also maintain nackup h/w resources
3	Poor internet connection	Make sure good internet connection

12. Entry and Exit Criteria:

The below are the entry and exit criteria for every phase of Software Testing Life Cycle:

Requirement Analysis

Entry Criteria:

- Once the testing team receives the Requirements Documents or details about the Project

Exit Criteria:

- List of Requirements are explored and understood by the Testing team
- Doubts are cleared

Test Planning

Entry Criteria:

- Testable Requirements derived from the given Requirements Documents or Project details
- Doubts are cleared

Exit Criteria:

- Test Plan document (includes Test Strategy) is signed-off by the Client

Test Designing

Entry Criteria:

- Test Plan Document is signed-off by the Client

Exit Criteria:

- Test Scenarios and Test Cases Documents are signed-off by the Client

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, Defect Reports are ready

Exit Criteria:

- Test Summary Reports

13. Approvals:

- Test Plan
- Test Scenarios
- Test Cases
- Test Scripts
- Reports

Testing will only continue to the next steps once these approvals are done.