Judiciary Information System

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Test Plan

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1. TEST PLAN IDENTIFIER

This is the plan to make a Judiciary Information System that focuses on helping the courts to manage all information regarding cases, judges, lawyers, and registrars. This test will ensure the functional test of the system and approach for how different types of tests are going to take place.

2. REFERENCES

The following were referred to while making the Test Plan document for Version 1.0 of the Judiciary Information System.

- IEEE 829-2008 Standard for Software and System Test Documentation, IEEE Computer Society 2008.
- Software Requirement Specification document for Version 1.0 of Judiciary Information System.
- Unified Modeling Language-based design for Version 1.0 of Judiciary Information System.

3. INTRODUCTION

This test plan describes the testing approach and overall framework that will drive the testing of Version 1.0 of the Judiciary Information System. This document is a high-level overview defining testing strategy for the Judiciary Information System software.

The document introduces the rules on which the test will be based, including the givens of the project and a description of the process to set up a valid test. It describes how the test will be performed and process to identify and report defects, and to fix and implement fixes. It also describes the process to handle the logistics of the test and all the events that come up during execution.

4. TEST ITEMS (FUNCTIONS)

The following functions are tested as part of this test plan for Version 1.0 of the Judiciary Information System:

- *User Login*: The Login function for all the three types of users are extensively tested so that login is possible if and only if the correct credentials are provided.
- *Add Case*: The function to add new cases to the case database is tested to ensure that only the cases with details completed are allowed to be added to the database.
- *Get Available Slots*: The function getAvailableSlots() is tested to ensure that all available slots are correctly displayed when a new case is added to the database.
- *Get Case Status*: The function getCaseStatus() is tested to ensure that the case status is displayed only when a correct CIN number is entered.
- Adjourn Case: The function to adjourn a case is tested to ensure that only the cases with a correct CIN and rescheduled date are accepted.
- Enter Hearing Summary: The function to enter hearing summary is tested to ensure that only the cases with a correct CIN and scheduled hearing date are accepted.
- **End Case:** The function to end a case is tested to ensure that cases can only be closed by providing a judgement and a summary.
- *View Resolved Cases*: Testing is done to ensure that the cases resolved in a particular period are listed.

- View Pending Cases: Testing is done to ensure that all the pending cases are listed.
- View Upcoming Cases: Testing is done to ensure that all the cases upcoming on a particular date are listed.
- Add User: Testing is done to ensure that new users can only be added by providing a valid username and password.
- **Delete User:** Testing is done to ensure that existing users can be deleted by providing a valid username.
- **Browse Case Details :** Testing is done to ensure that Lawyers and Judges are able to browse previous case details by providing some keywords.
- Pay Charge: Testing is done to ensure that Lawyers are able to browse previous cases only when they have sufficient balance in their wallet to pay the charge for browsing.
- Add Money: Testing is done to ensure that the registrar can add money to any lawyer's wallet by providing their correct username.

5. SOFTWARE RISK ISSUES

Our main goal is to design a test strategy that utilizes a balance of testing techniques to cover a representative sample of the system in order to minimize risk. There are several parts of the project that are not within the control of the application but have many significant impacts on the process and therefore must be checked as well.

The main disadvantage of this website is one user can use only one website at a time.

Some other software issues like problems in database management, server down, etc.

6. FEATURES TO BE TESTED

The following features are tested in the software:

Registrar:

- User Login
- Create User
- Delete User
- Add Case
- View Case Status
- Update Case Details
- Get Case Details
- Close Case
- Add money

Judge:

- User Login
- Browse Case

Lawyer:

- User Login
- Browse Case

These are the features to be tested.

7. FEATURES NOT TO BE TESTED

The feature of storing data in the database for users and cases is done using MySQL (RDBMS) and SQL queries which have been thoroughly tested and multiply used by many people. Hence it need not be tested separately.

Logout functionality is not being tested separately because it just returns the user to the login screen, which has already been tested.

Clear screen is not being tested as it just clears the screen for showing updated or new information.

8. APPROACH (STRATEGY)

The Unit Testing methods are carried on all the classes in the Judiciary Information System. Both the Black Box and White Box testing approaches are incorporated. In essence, we must therefore test each class in isolation, and each functionality in isolation using white box and black box techniques. The use cases, their description, test inputs, and the Black-Box and White-Box outputs are displayed. If there does not exist both types of outputs, only the appropriate output is displayed.

9. ITEM PASS/FAIL CRITERIA

If an item tested 5 times, worked perfectly for 4 times and do not work properly for a single time then it will be consider as fail case:

- System crash will be considered as a fail case.
- After Submitting query in the system, if the expected page wouldn't appear then it will be considered a fail case.

To an Item test to pass the above criteria should be working properly

10. SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

Testing is performed by the group members to ensure that all the functionalities are working properly in the software. Testing is suspended whenever any error is encountered since it will cause the program to repeatedly crash or behave unpredictably.

11. TEST DELIVERABLES

The project submission must be on time and should be checked for its proper functioning.

12. REMAINING TEST TASKS

This Test Plan for the Version 1.0 of the Judiciary Information System implements only the Unit Tests. The Test Task remaining are:

- Integration Testing: Assigned to the Developers and Product Manager
- Performance Testing: Assigned to the Developers and Product Manager
- Acceptance Test Plan: Assigned to the Project manager and Clients

13. ENVIRONMENTAL NEEDS

There are some special requirements for this test plan, such as:

- Access to the database for information management.
- Proper internet connection, proper coding on both backend and frontend side.
- Testing to be implemented on all basic components, it may be system testing or unit testing.

14. RESPONSIBILITIES

The group members are responsible for all the decisions, managing total implementation, responsible for designing tests, creating test procedures, and creating data.

- It includes testing of all components in order to avoid any failure of the system.
- *It must also include categorizing the features that should be tested regularly.*

15. PLANNING RISKS AND CONTINGENCIES

Following are the likely planning risks and possible contingencies of them

- Unavailability of Website: Testing will be delayed until the website is reestablished. Possible contingency can be to increase testers or reduce number of test cases.
- *Time problem*: There may not be enough time to complete all test cases. In that case we can skip the cases with lower priorities.
- Lack of Tester: If testers are unavailable, test cases can be reduced by eliminating cases with low priority.
- Large Number of Defects: A large number of defects make it functionally impossible to run all of the test cases. In that case release of the version needs to be delayed.

16. APPROVALS

Thes Test Plan is to be approved by all concerned parties including the Developers, Test Team, and the authorities under which and to whom this project is developed and to be submitted.

17. GLOSSARY

Following are the terms and acronyms used in the document, and testing in general, to eliminate confusion and promote consistent communications.

- *Coding*: The generation of source code.
- **Deliverable**: Any (work) product that must be delivered to someone other that the (work) product's author.
- Pass/Fail criteria: Decision rules used to determine whether a test item (function) or feature has passed or failed a test. [IEEE 829]
- **Testing:** The process of exercising software to verify that it satisfies specified requirements and to detect errors.
- **Test Case:** A set of inputs, execution preconditions, and expected outcomes developed for a particular objective, such as to exercise a particular program path or to verify compliance with a specific requirement.
- *Unit Testing*: Testing of individual software components.
- **Tester**: A technically skilled professional who is involved in the testing of a component or system.