

Test Plan

for Road Repair and tracking Software

Version 1.0 approved

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Test Plan For RRTS

1 TEST PLAN IDENTIFIER

RRTS version 1.0

2 REFERENCES

IEEE-829 Test Plan Template is followed to prepare this test plan.

3 INTRODUCTION

This is the Test Plan for the Road Repair and Tracking project. This plan will address only those items and elements that are related to the Road Repair and Tracking Software, both directly and indirectly affected elements will be addressed.

The details for each testing will be addressed in the approach section and will be further defined in the level specific plans.

4 TEST ITEMS (FUNCTIONS)

The various functions and scenarios were tested to ensure the successful release of the Library Information System. It complies with the standards issued by IEEE with respect to projects related to software engineering.

5 SOFTWARE RISK ISSUES

There are several parts of the project that are not within the control of the Road Repair and Tracking application but have direct impacts on the process and must be checked as well.

- A. The user must make sure that the version of the programming language on the device should be compatible with that of the application.
- B. The backup and recovery of the local databases and restart of the application must be carefully checked.
- C. The Software relies on a stable internet connection to run smoothly and to be able to communicate with the database.

Test Plan for Road Repair and Tracking Software

- D. The ability to restart the application in the middle of the process is a critical factor to application reliability. This is especially true in the case of the transmission files as once the data is pulled from the mailbox it is no longer available there and must be protected locally.

6 FEATURES TO BE TESTED

The following is a list of the areas to be focused on during testing of the application.

- Login Interface
- Register Complaints
- Delete (new)Complaints
- Add Needed Resources
- Mark a work completed
- Work Schedule
- Update Resources
- Work Statistics
- Edit Profile

7 FEATURES NOT TO BE TESTED

The following features were not tested

- Compatibility of the software across various browsers, operating systems and different versions of react.

8 APPROACH (STRATEGY)

For all the features to be tested we will make the required test cases such that all the corner cases will also be covered and check them. The basic approach followed while testing the software was by design and Test method. The simplicity and speed of testing using this method is very high. As a result, we were easily able to create functions, test functions, test them, then check them in the backend or console or in the website. We also kept in mind the possible weak points where the software is most vulnerable and performed repeated tests for those points to ensure no breakage of software functionality.

9 ITEM PASS/FAIL CRITERIA

The test case is passed if the desired output is produced i.e, if all the buttons are submitting the information correctly or doing the functionality correctly and all the pages in the website are displaying the correct information in the correct page. While the test case is considered to be failed if we don't get the desired output for correct inputs i.e, if any functionality doesn't work. The pass/fail conditions are of great significance as it determines the quality of website.

10 TEST DELIVERABLE

The following are to be supplied as a part of the final test report:

1. Software Requirements Document(SRS)
2. Test compliance report
3. Test plan

11 ENVIRONMENTAL NEEDS

The following elements are required to support the overall testing effort at all levels within the project:

- A. Access to the connected database management system used for backend

12 STAFFING AND TRAINING NEEDS

It is preferred that there will be at least one clerk assigned to the project for the system/integration and acceptance testing phases of the project. This will require assignment of a person part time at the beginning of the project to participate in reviews. If a separate test person is not available the project developer will assume this role. In order to provide complete and proper testing the following areas need to be addressed in terms of training.

- A. The developers and tester(s) are familiar with basic interaction with the interface.
- B. The clerks and supervisors will require training in the ways input is provided and accessing the data they are allowed to obtain.
- C. At least one clerk or branch member needs to be trained on the control of the PC based project. The administrator personnel will also have to be trained on the PC based package and its operational characteristics.

13 RESPONSIBILITIES

The development team will be responsible for the verification and acceptance of all test plans and documentation.

The project development team is responsible for all test plans and documentation.

The entire project team will participate in the review of the system and detail designs as well as review of any change requests that are generated by the user or as a result of defects discovered during development and testing. The evaluating staff is also required to participate in the initial system review.

14 SCHEDULE

Each functionality and its working were checked as soon as it was designed or coded. This helped us in checking and eliminating immediately the errors that could have popped up. Apart from that the overall working of the website and testing was done rigorously to avoid any unnoticed errors else the test cases and outputs were noted over a period of days.

15 APPROVALS

The website or the project is checked and verified by our members before submission. Our respective TA checked for the various documents and their credibility