

TEST PLAN

For

Transport Company Computerisation (TCC) Software

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1 TEST PLAN IDENTIFIER

TCCMTP01

2 REFERENCES

- The submitted SRS documentation of the TCC software
- IEEE 829 format

3 INTRODUCTION

This is the test plan for the Transport Company Computerisation (TCC) Software. A detailed high level overview of our testing strategy, schedule and constraints will be provided, as well as the approach followed for the same

A primary focus will be unit level testing, and the ensuring functioning of all the fundamental features

4 TEST ITEMS (FUNCTIONS)

The front end, backend and basic database functionality of TCC Software 1.0. This includes testing the GUI elements (button functionalities, loading of widgets etc), classes, and methods used

5 SOFTWARE RISK ISSUES

- The use of 3rd party database services
- Security of Manager (admin) login
- Accurate dispatch of trucks in real time

6 FEATURES TO BE TESTED

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

- Checking the Login with valid User Id and Password for manager and employee.
- Logout functions.
- Input the the details of trucks currently in service in the company

- Input the details of consignment.
- Dispatch truck
- Input the consignment volume and assign trucks for its transportation
- Add employee details and credentials.
- Change employee passwords (available only for Manager)
- Issue a bill in regards to the volume of cargo transported.
- Displaying the volume of cargo in different trucks at any given time , accessible only to the manager
- Displaying the usage status of different trucks at any given time , accessible only to the manager.
- Print the details of the consignment once the cargo truck is ready to be dispatched.
- Display the details of a particular consignment in transit,or history accessible only to the manager.
- Display the current state of a truck, the distance traveled, average ideal time and availability at any particular instance of time ,accessible only to the manager.
- Display statistics for average waiting time for consignment loading, revenue, etc.

7 FEATURES NOT TO BE TESTED

- Database security features
- Performance for Branch Employee systems

8 APPROACH (STRATEGY)

- Unit testing will be performed for each individual Module
- Every class will have its methods tested for correct functionality
- Test methods will be implemented in classes during the testing phase to track its state during the test cases
- Basic read-write functionality of database will be tested by matching entries to the expected values
- GUI will be tested to ensure proper functioning of buttons and functionality

9 ITEM PASS/FAIL CRITERIA

Item pass criteria is the passing of all test cases. Failure of a single test case is sufficient criteria for software failure

10 SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

The system should satisfy all the functional requirements mentioned in the S.R.S document. Each feature to be tested will be evaluated against its requirement as stated in the S.R.S Document.

11 TEST DELIVERABLES

- The test plan strategy
- The documentation on Test cases and Test suite
- A comprehensive unit testing strategy

13 ENVIRONMENTAL NEEDS

- The software will work on Windows (7 or Later), Linux.
- Constant internet connection will be required for running the software, to communicate with the database

14 STAFFING AND TRAINING NEEDS

At-least 2 persons from the project are needed to present the test cases and to discuss the software's output. One to co-ordinate and other to assist the display of cases.

15 SCHEDULE

Testing will begin once basic software functionalities have been coded, with the tentative start date scheduled on 28/3/2022

Testing and development of high priority features (as detailed in the SRS documentation) will occur first. Based on the production timeline, this might simultaneously with the coding of low priority features

Final testing is scheduled to end on or before 2/4/2022

19 GLOSSARY

TCC- Transport Company Computerisation

SRS- Software Requirement Specification

IEEE- Institute of Electrical and Electronics Engineers