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Supermarket Automation Software

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TEST PLAN IDENTIFIER

SAS-MTP01.1

REFERENCES

Software requirement specifications Use case diagram Test case diagram

Introduction

This is the Master test plan for the Supermarket Automation Software project. This plan will only address those items and elements that are related to the supermarket automation software, both directly and indirectly affected elements will be addressed. It includes all the possible tests that need to be done to ensure the correctness and reliability of software to be implemented. The software should pass all the tests before it can be delivered. The use case diagram describes the interaction between the system and its actors. The class diagram describes about the classes along with their attributes and methods. There will be no budget constraints as the only requirement is the database and there is no necessity for manual maintenance.

Test items

The following are the list of functions that are to be tested :

- Manager
 - a) Change Price
 - b) View Sales Statistics
 - c) View Inventory
- Inventory Management Staff
 - a) Add Product
- Sales Clerk
 - a) New Transaction
 - b) Print Bill

Software risk issues

The risks involved are as follows:

1. The system features run perfectly
2. The other risk involved is databases. The database containing the information regarding the login credential should be kept safe. They must not be corrupted
3. The manager credentials need to be kept safe as it is important.

Features to be tested

The features to be tested are as follows:

- The login of manager, employee and other staff of the supermarket needs to be done successfully.
- The login credentials of manager, inventory management staff and other staff should be saved in the database.
- The inventory management staff can update quantity of products in inventory.
- The manager should be able to update the prices of the products on a day-to day basis.
- The inventory management staff should be able to update the quantity of the products when new supply arrives.
- The sales statistics of the supermarket should be printed when asked by the manager.
- The inventory details of the supermarket should always be saved and updated whenever a new purchase/transaction is made.

The sales clerk should be able to scan using the barcode reader and weigh using the automatic weighing scale.

Features not to be tested

The features which cannot be tested are as follows:

1. The network and security from the user point of view cannot be checked by this software
2. The efficiency and reliability of the server used cannot be checked.
3. Checking if the user entering the password is the correct one,i.e can't verify user by any means like mobile number OTP verification etc

Approach strategy

Testing Levels: The following testing levels are present:

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- Unit level • System Level(application testing)

UNIT LEVEL TESTIN 1.Manager

Checking the Change price, View sales statistics and View inventory options

2.Inventory Management Staff

Checking the Add product option

3.Sales Clerk

Checking the New transaction and print bill options.

These unit tests will be done by the development team and the development leader will check the unit tests.

APPLICATION TESTING

- **Manager**
 - Login of manager
 - Logout of manager
 - Checking the functions related to the manager
 - Checking if the manager has access to the respective functions
- **Inventory Management staff**
 - Login of the staff
 - Logout of the staff
 - Checking the functions related to the IM staff
 - Checking if the staff have access to the respective functions
- **Sales Clerk**
 - Login of the sales clerk
 - Logout of the sales clerk
 - Checking the functions related to the sales clerk
 - Checking if the sales clerk has access to the respective functions

Application testing is actually a series of different tests which are generally used to test all the functions related to the software. The run time performance can also be checked by application testing.

Testing tools

The testing tools used are:

1. All tests will be done in python.
2. Manual testing is done for frontend.

This is the overall test strategy for this test plan; it should be appropriate to the level of the plan (master, acceptance, etc.) and should be in agreement with all higher and lower levels of plans. Overall rules and processes should be identified.

Item pass/fail criteria

The completion criteria for the plan are:

1. Unit level
 - a. The unit tests are checked once.
2. System level
 - a. The application tests are passed once.

Suspension criteria and resumption requirements

- 1) If the login of a registered user is failed then the test procedure is suspended.
- 2) If functionalities are tested individually and if one fail we can proceed with testing of other functionalities.

Test deliverables

Unit test plans

Defect/Incident reports and summaries

Test logs and turnover reports Test

Suite (with test cases and outputs)

Remaining Test tasks

None

Environmental needs

There is no specific hardware required for the testing of the software and we need files where test data is stored and given to the SAS. There are no special requirements for power.

SAS doesn't require much RAM, so you can use other applications simultaneously while using this SAS. But an internet connection of sufficient speed is required

Staffing and training needs

The Staff of the Supermarket are trained to operate the Computer and the Supermarket Software.