**Chapter 5. Testing**

**2.1 Test Plan**

AC Expertz

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1.0 INTRODUCTION

The app “AC Expertz” is a “Feedback app” which will help AC Expertz – Air Conditioning Store” customers to give feedback easily to the owner about the current scenario after installation of the AC’s and will also keep the owner updated about the situation at the customers side.

Business Requirements for the app “AC Expertz” can be listed as below:-

User Requirements:- 1) To ease the whole installation process of AC.

2) To give the feedback to owner in more easier way.

3) To ensure that he has given the right amount to the salesman.

4) To know the AC is correctly installed or not.

5) To keep owner updated about the current scenario without actually need of talking with him.

Owner Requirements:- 1) An app which will help customers to fill the details after the installation of the AC.

2) An app will which will keep the owner updated about the current scenario at the customers side.

2.0 OBJECTIVES AND TASKS

2.1 Objectives

Communicate to all stakeholders the detailed plan for developing UAT tests and the outline plan for running them.

Communicate to all stakeholders the detailed plan for running the UAT tests.

The rest of the objectives can be modified or deleted as required:

What is to be done in UAT.

Define the scope of what will be tested.

Estimate the people and other resources required.

Organise the activities and timescales.

Specify the approach taken to testing.

Define the deliverables expected.

Specify how the testing results will be evaluated.

Estimate the risks to testing plan and how to mitigate them.

2.2 Tasks

Testing for the sake of removing the bugs, post-testing, problem reporting, etc.

3.0 SCOPE

General

We are going to check whether the app is taking the feedback correctly or not. And we will be testing the existing interface.

4.0 TESTING STRATEGY

A test strategy is an outline that describes the testing approach of the software development cycle. It is created to inform project managers, testers, and developers about some key issues of the testing process.

4.1 Unit Testing

Specifying the minimum degree of comprehensiveness desired, we identify the techniques

which will be used to judge the comprehensiveness of the testing effort. The testing techniques which we are going to follow can be listed as follows:- Boundary Value Analysis (BVA), Equivalence Partitioning (EP), Decision Table Testing, State Transition Diagrams, Use Case Testing

Participants:

Madhura Paralikar

Methodology:

A testing methodology is a tool or method used to test an application. As you listed, some methodologies include monkey testing, automated UI testing, regression testing, and so forth.

4.2 System and Integration Testing

Definition:

Most of the Software applications which are developed are usually broken into many modules and given to different teams. These modules are then usually developed individually and later on integrated to form the complete software application. When two or more modules are combined and tested, it is called integration testing. After all the modules are combined and the complete system is made, testing of the whole system is known as System Testing. Since this application is developed as a individual project, there is no need of integrating the small modules.

Participants:

Madhura Paralikar.

Methodology:

It's a systematic technique for constructing the program structure while conducting tests to uncover errors associated with interfacing. All modules are integrated in advance, and the entire program is tested as a whole. But during this process, a set of errors is likely to be encountered.

Correction of such errors is difficult because isolation causes is complicated by the vast expansion of the entire program. Once these errors are rectified and corrected, a new one will appear, and the process continues seamlessly in an endless loop. To avoid this situation, another approach is used, Incremental Integration. We will see more detail about incremental approach later in the tutorial.

There are some incremental methods like the integration tests are conducted on a system based on the target processor. The methodology used is Black Box Testing. Either bottom-up or top-down integration can be used.

4.3 Performance and Stress Testing

Definition:

In stress testing we check the point at which the certain software breaks.

Participants:

Madhura Paralikar.

Methodology:

Stress testing, both regulatory and internal, is aimed at providing a detailed picture of a software current risk position, its key risk drivers, and the main sensitivities of its portfolio. These tests offer a comprehensive, forward-looking perspective on a shop full balance sheet and profit and- loss statements, giving the shop an assessment of the combined impact of all the risks it might face.

4.4 User Acceptance Testing

Definition:

The purpose of acceptance test is to confirm that the system is ready for operational use.

During acceptance test, end-users (customers) of the system compare the system to its

initial requirements.

Participants:

Atul Kulkarni.

Methodology:

The test scripts will be written by Madhura Paralikar and the owner will check whether the requirements for the applications are fulfilled or not.

4.5 Batch Testing

4.6 Automated Regression Testing

Definition:

Regression testing is the selective retesting of a system or component to verify that

modifications have not caused unintended effects and that the system or component still

works as specified in the requirements.

Participants:

Methodology:

4.7 Beta Testing

Participants: Customers of AC Expertz

Methodology: Beta Testing of a product is performed by "real users" of the software application in a "real environment" and can be considered as a form of external User Acceptance Testing.

5.0 HARDWARE REQUIREMENTS

Computers

Modems

6.0 ENVIRONMENT REQUIREMENTS

6.1 Main Frame

Winrunner 8.2,

6.2 Workstation

Winrunner 8.2

7.0 TEST SCHEDULE

Including test milestones identified in the Software Project Schedule as well as all item

transmittal events.

8.0 CONTROL PROCEDURES

Problem Reporting

If a standard form is going to be used, we will attach a blank copy as an "Appendix" to

the Test Plan. In the event we are using an automated incident logging system, we will write

those procedures in this section.

Change Requests

Document the process of modifications to the software. Identify who will sign off on the

changes and what would be the criteria for including the changes to the current product.

If the changes will affect existing programs, these modules need to be identified.

9.0 FEATURES TO BE TESTED

Validations, database, etc.

10.0 FEATURES NOT TO BE TESTED

Admin login- It doesn’t need to be tested.

11.0 RESOURCES/ROLES & RESPONSIBILITIES

Developers, testers, operations, staff, testing services, etc.

12.0 SCHEDULES

Major Deliverables

- Test Plan

- Test Cases

- Test Incident Reports

- Test Summary Reports

13.0 SIGNIFICANTLY IMPACTED DEPARTMENTS (SIDs)

Computer Science Department

14.0 DEPENDENCIES

Significant constraints on testing, such as test-item availability, testing-resource

availability, and deadlines are there which we need to cater.

15.0 RISKS/ASSUMPTIONS

Delay in delivery of test items might require increased night shift

scheduling to meet the review date

16.0 TOOLS

Winrunner 8.2

Bugzilla

17.0 APPROVALS

Name Signature Date

1. Pankaj Katkar. 16/04/2018

2. Manisha Mundhe 16/04/2018

**5.2 Functional test cases.**

Functional test cases for splash activity, homepage, navigation drawer activity, about us, services, feedback, contact, admin login.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case Id | Input Data | Expected Result | Actual Result | Remark | Approval |
| TC1 | Name | ABC | ABC | Pass | Ok |
| TC2 | Contact Number | 10 digit number | 7 digit | Fail | Not ok |
| TC3 | Address | ABC xyz | ABC xyz | Pass | Ok |
| TC4 | Empty Validation | Shows validations | Shows Validations | Pass | Ok |
| TC5 | Dialler Showup | Shows dialler when clicked on number | Showing up dialler | Pass | Ok |
| TC6 | Should show ratings clicked. | Showing the ratings properly | Ratings displayed properly | Pass | Ok |
| TC7 | Should redirect to email when clicked | Redirecting properly. | Redirecting properly. | Pass | Ok |