

Chapter 5: TESTING

5.1 Test Plan

INTRODUCTION

The Test Plan is designed to check the scope of all testing activities of the project “Gym App”. The plan identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

1. TEST STRATEGY

1.1 Scope of Testing

1.1.1 Feature need to be tested

These features are to be tested because they are included in the software requirement specs

- User Interfaces
- Hardware Interfaces
- Software Interfaces
- Database logical
- Communications Interfaces

1.2 Test Type

In the project No dues, there're 3 types of testing should be conducted.

- **Integration** Testing (Individual software modules are combined and tested as a group)
- **System** Testing: Conducted on a complete, integrated system to evaluate the system compliance with its specified requirements
- **API testing:** Test all the APIs create for the software under tested

1.3 Test Logistics

1.3.1 Who will test?

The project should use **outsource** members as the tester to save the project cost

1.3.2 When will test occur?

The tester will start the test execution when all the following inputs are ready

- Software is available for testing
- Test Specification is created
- Test Environment is built

2. TEST OBJECTIVE

The test objectives are to **verify** the Functionality of Application Gym App, the project should focus on testing the **operation** such as Login, entering Username, Password , and details of students, to **guarantee** all these operation can work **normally** in real environment.

3 TEST CRITERIA

3.1 Suspension Criteria

If the team members report that there are **40%** of test cases **failed**, suspend testing the development team fixes all the failed cases.

3.2 Exit Criteria

Specifies the criteria that denote a **successful** completion of a test phase

Run rate is mandatory to be **100%** unless a clear reason is given.

Pass rate is **80%**, achieving the pass rate is **mandatory**.

4. RESOURCE PLANNING

No.	Member	Tasks
1.	Test Manager	Manage the whole project Define project directions Acquire appropriate resources
2.	Test	Identifying and describing appropriate test techniques/tools/automation architecture Verify and assess the Test Approach Execute the tests, Log results, Report the defects. Outsourced members
3.	Developer in Test	Implement the test cases, test program, test suite etc.
4.	Test Administrator	Builds up and ensures test environment and assets are managed and maintained Support Tester to use the test environment for test execution
5.	SQA members	Take in charge of quality assurance Check to confirm whether the testing process is meeting specified requirements

TABLE 5.4.1: PLANNING OF RESOURCES.

5. SCHEDULE & ESTIMATION

5.1 All project task and estimation

Task	Members	Estimate effort
Create the test specification	Test Designer	170 man-hour
Perform Test Execution	Tester, Administrator	80 man-hour
Test Report	Tester	10 man-hour
Test Delivery		20 man-hour
Total		280 man-hour

TABLE 5.1.1: PROJECT TASKS

6. TEST DELIVERABLES

Test deliverables are provided as below

6.1 Before testing phase

- Test plans document.
- Test cases documents
- Test Design specifications.

6.2 During the testing

- Test Tool
- Simulators.
- Test Data
- Test Trace-ability Matrix
- Error logs and execution logs.

6.3 After the testing cycles is over

- **Test Results/reports**
- Defect Report
- Installation/ Test procedures guidelines
- **Release notes**

5.2 Test Cases

Sr.no.	Test Case Id	Test Scenario	Test Steps	Test Data	Expected Results	Actual Result	Pass/Fail
1.	TC001	Check Account-section login page with valid data	1.Open app 2.Enter Email id 3.Enter password 4.Click login	Email= admin@gmail.com Password=admin	User should login into application.	As Expected	Pass
2.	TC002	Check Account-section login page with invalid username.	1.Enter invalid Email id 2.Enter password 4.Click login	Email= admingmail.com Password=admin	Application should give error.	As Expected	Pass
3.	TC003	Check Account-section login page with invalid password.	1.Enter valid Email id 2.Enter invalid password 4.Click login	Email= admin@gmail.com Password=123654	Application should give error.	As Expected	Pass
4.	TC004	Check Account-section login page with invalid username as well as invalid password.	1.Enter invalid Email id 2.Enter invalid password 4.Click login	Email= admin@.com Password=123321	Application should give error.	As Expected	Pass
5.	TC005	Check Account-section login page with blank username and valid password.	1.Don't enter Email id 2.Enter valid password 4.Click login	Email=_____ Password=admin	Application should give error.	As Expected	Pass
6.	TC006	Check Account-section login page with blank password and valid username.	1.Enter valid Email id 2. Don't enter password 4.Click login	Email= admin@gmail.com Password=_____	Application should give error.	As Expected	Pass

TABLE 5.2.1: TEST CASES FOR LOGIN PAGE