

Test Plan of Student Registration System for A University

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1 Test Plan Identifier

SRSFU 0.1

2 References

- SRS Document
- Project Plan

3 Introduction

The system is an online student registration system for a University. Objective of this document is to build the software test plan for the system. It contains the designed schema for overall test process maintaining all the requirements and functionalities mentioned in the SRS document provided.

4 Test Items

- Academic year selection package, Version 1.0, Identifier - SRSFU 0.1-FR6.1V1.0
- Semester selection package, Version 1.0, Identifier - SRSFU 0.1-FR6.2V1.0
- Add courses package, Version 1.0, Identifier - SRSFU 0.1-FR7V1.0
- Chose section package, Version 1.0, Identifier - SRSFU 0.1-FR8V1.0
- Remove course package, Version 1.0, Identifier - SRSFU 0.1-FR9V1.0

5 Software Risk Issues

- Failure in updating course, section data in real time.
- Problem in integration with other modules.
- Abnormal system responses due to extra load or power failure.
- Extra load to the database server, database security issues.

6 Features to be Tested

1. Student shall be able to select the Academic year and the Semester to register, FR6.1,FR6.2 Prority - High
2. Student shall be able to add courses to registration, FR7 Priority - High
3. Student shall be able to choose preferable section for a course, FR8 Priority - High
4. Student shall be able to remove a selected course , FR9 Priority - High

7 Features Not to be Tested

All the required features from the SRS are vital and can not be skipped from testing.

8 Approach

8.1 Test Tools

- Selenium - for automated testing of web application.
- Different browsers like Chrome,Firefox,IE,Safari - to test the UI and run time behavior.
- Unit testing will be done by developer while writing the code.

8.2 Measures and Metrics

The following data will be collected from development team while unit testing:

- Runtime of code
- Exception types and frequencies
- Unmanaged exceptions
- Possible error sources

The following data will be collected from test team:

- Integration problems with other modules
- Result of each test suit
- Passed and failed test items
- Defect level of each module
- Average number of system crash while running for a certain time

8.3 Meetings

The test team will hold a meeting at the beginning and at the end of each week internally. Also the test team will hold a meeting with Project Manager and developer team once in every week to update and be updated about the process and report on test progress.

9 Item Pass Fail Criteria

- SRSFU 0.1-FR6.1V1.0 - Passing 100% test cases will make this item pass the test process.
- SRSFU 0.1-FR6.2V1.0 - Passing 100% test cases will make this item pass the test process.
- SRSFU 0.1-FR7V1.0 - Passing 100% test cases will make this item pass the test process.
- SRSFU 0.1-FR8V1.0 - Passing 100% test cases will make this item pass the test process.
- SRSFU 0.1-FR9V1.0 - Passing 100% test cases will make this item pass the test process.

10 Test Deliverables

- Unit test results
- System test plans and results
- Acceptance test plans and results

- UI test results
- Test cases
- Test log and summary

11 Remaining Test Tasks

Task	Assigned to	Status
Prepare Acceptance test plans	PM,TM,Client	Processing
Prepare Integration test plans	PM,TM,Developer	Processing
Prepare Test Cases	TM and Test Team	Processing
Acquire tools	PM,TM,Developer	Processing

12 Environmental Needs

12.1 Tools

1. MS Word
2. MS Excel
3. Adobe PDF maker
4. Selenium

12.2 Configuration Management

- Documents CM : SVN
- Code CM : GitHub

12.3 Test Environments

- Browsers : Edge, Chrome (latest), Firefox (latest), Yandex (latest), Opera (latest)
- OSs : Android, iOS, Linux Ubuntu
- Screen types : Landscape, Portrait

13 Staffing and Training Needs

Members of test team must be familiar with all the test tools and environment mentioned. If not then they must be trained and this training time must be added with the project time line.

14 Responsibilites

Designation	Responsibilities
Project Manager	Review test plan, process, decide acceptance criteria
Test Lead	Design test plan, take decisions on test process
Test Team	Execute test plan, report to TL
Development Team	Unit testing, report PM,TL
Client	Help building acceptance criteria

15 Schedule

SL	Task	Duration	Predecessors
1	Review Requirements	1 Days	None
2	Test Design	3 Days	1
3	Acceptance test plan	3 Days	2
4	Integration test plan	3 Days	2
5	Generate Test Cases	2 Days	3,4
6	Execute Test Plan	2 Days	3,4,5
7	Test Review and report	2 Days	6

16 Planning Risks and Contingencies

- Requirement changes or updates : To avoid hassle on requirement updates, modules must be de-coupled and dependencies must be injected properly
- Not enough data to test : Generate enough number of dummy data while testing if there are not enough data at the beginning. But these dummy data set must maintain the requirement and must be suitable for testing.
- System crash or overload : Test load balancing of each module then test the integration level if there any issue which can cause

the system crash due to overload.

17 Approvals

Designation	Signature
Test Lead	-
BA	-
Project Manager	-
Client	-