

AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH

FARZANA BENTE ALAM



Assign./Case Title:	Developing a Test Plan for Student Registration System for a University		
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Course Teacher:	Farzana Bente Alam		
Group Name/No.:	Null		

No	Name	ID
1	Tareq,Md. Ikram	16-32231-2
2	Fahmida,Maisha	16-32192-2
3	Amina,Rubaia	16-32975-3
4	Keya,Nabila Zaman	16-32882-3

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FACULTYCOMMENTS	Marks Obtained	
	Total Marks	

1.Test Plan Identifier:

Master test plan for student registration system

2.References:

- * IEE standard for software test plan documentation system 829
- * Wikipedia
- * softwaretestingfundamentals.com
- * Software requirements specification of the student registration system

3. Introduction:

Test plan is a document that is provide details on how testing process will be conducted for any project. It is the basis for formally testing any software in a project. The test plan are likely other software documentation. They are dynamic in nature and must be kept up to date. Here the test plan for the project under taken name “Developing a test plan for student registration system for a university”. This system will enable students to register online for courses each semester. The purpose of thinking through all the courses for a system’s functional requirements. Functional requirements are those aspects of a system that have to do with it will it is operate or function from the perspective of someone using of the system.

We have tried our best make the test plan as useful as possible in limited experienced. The test plan construct below in an informal way using sequential layout.

4.Test Item (function):

A test item of a component or system that could be verified by one or more test cases like a function, transaction, feature, quality, attribute. It is a specific task for test takers are asked to perform. Test item can assess one or more points or objectives and the actual item may take on different shape depending on the association. In this projects test item are:

1. Login
2. Validation
3. Student’s Information
4. Student Name
5. Faculty Name

6. Dropping course option
7. Shoe section
8. Go to registration
9. Course & Result
10. Notice given by faculty
11. Notes given by faculty
12. Student download the notes
13. Log out

5. Software Risk Issues:

1. Competency to access new features of that software.
2. Intractability to use software.
3. To make the software feasible.
4. Robustness.
5. Bug setting and solving.
6. To maintain such a big software.
7. Misunderstanding of the original requirements.
8. Safety.

6. Feature to be tested:

For student's:

1. Edit name but not Id.
2. Change password.
3. Registration for upcoming semester.
4. Login.
5. Logout.
6. Show the previous semester courses, results and faculty.
7. Select section for a course.
8. Remove course.

For advisor:

1. Permit student to add or remove course.
2. Change password.

For administrator:

1. Login.
2. Add and delete course.
3. Edit course description.
4. Open new section.
5. Close section.
6. Change password.

For system:

1. Display the schedule for any student.
2. Display all the details for a section.
3. Identify the number of students in each section of a course.

7. Features Not to be Tested:

1. Using information of faculty,
2. Showing grading system,
3. Unoffered course for registering,
4. Maximum number crossed for section,
5. At same time student register two courses,
6. Verification Id for validation,
7. Extra class timing.

8. Approach:

1.

Planning: At the very begin we have to select a proper plan for doing testing. we have to take care about which software will be used , how many days we need , how many tester we need. Those are the part of planning.

2.

Viewing: The team try to view in a week to maintain the progress and find errors and problem as soon as possible. The leader try to visit the developers and the management within two weeks. Sometimes for emergency there some additional meeting.

3.

Testing planning: In this case we use 3 testing levels. They are unit testing, integration testing and acceptance testing. Unit testing is used for developers and allowed by development team leader. Then comes integration. It is used by managers and development team leader with their assistance.

4.

Reviewing: The testing team leader will review the result.

9. Item pass/fail criteria:

Before reaching one phase we have to complete previous phase. Software requirements specification version 1.0 is used for our criteria. The criteria are given below:

1)Expected result have to take place according to the case and then we can say the case is passed otherwise failed.

2)Fail crash will happen when system will crush.

3)suppose we test an item 12 times. If 11th time it works properly but it failed for once.it means it failed.

4)our expected page if won't appear after submitting a query then we can say it is failed.

10. Suspension Criteria and Resumption Requirements:

Our test plan is prepared in a way that the testing activities can be stopped and resumed if needed. If any component is unavailable during test execution, or any defect is detected, testing process will remain suspended and it will be resumed as soon as components Become available or the defect is resolved. Here in this test plan suspension resumption strategy has been followed, so that the resources of an organization are not wasted unnecessarily.

11. Test Deliverable:

The following documents will be generated for these testing activities:

- o Test Strategy.
- o Master test plan.
- o Individual test plans for each phase of the testing cycle.
- o Test Design Specifications.
- o Test log for each phase.
- o Acceptance Test plan.
- o Unit test plan.
- o Screen Prototypes.
- o Test Data.
- o Test report.
- o Test scenario and expected result in an excel sheet.
- o Test Execution Report.
- o System manual.

12. Remaining test tasks:

The following test task will be performed too as a part of testing process.

1. Documentation Testing

All the document including user guide and installation guide also be tested so that the user doesn't face any problem to use the system.

2. Pair Testing

Pair testing is always more effective. A pair testing will be performed to know about better ideas to test and to understand different scenarios and many other tricks about testing.

13. Environmental Needs:

The following elements are required to support the overall testing effort of the project:

- o Access to the AIUB official website
- o Access to the database
- o Server management tools an OS.
- o Restricted use of the system during testing.

14. Staffing and Training Needs:

A full-time tester will be assigned to test the project for the integration and acceptance testing phases. If anyone of the test person is not available the project manager/test manager may undertake this role.

To perform proper testing the testers will need to be trained on the basic operations of Student Registration System. Before final acceptance of the project the administration staff will require complete training on different functionalities of the system. So, training criteria will be

- o Training on the application/system.
- o Training for any test tools to be used.
- o The Test Items and Responsibilities sections affect this section. What is to be tested and who is responsible for the testing and training.

15.Responsibilities:

Responsibilities	Test Manager	Project Manager	Development Team	Test Team	Client
Acceptance test Documentation & Execution	√	√	√	√	√
System/Integration test Documentation & Exec.	√		√	√	
Unit test documentation & execution	√		√	√	
System Design Reviews	√	√	√	√	√
Detail Design Reviews	√	√	√	√	√
Test procedures and rules	√	√		√	
Screen & Report prototype reviews	√	√	√	√	√
Change Control and regression testing	√	√	√	√	√
Data validation	√	√		√	√

The development team leader will be responsible for the verification and acceptance of all unit test plans and documentation.

The project manager/test manager who will do all test plans and documentation and will be responsible for it.

Whole project team will participate or attend in the review of the system and detail designs as well as review of any modification requests that are generated by the students or any kind of user or the defects observed during development and testing. The administration of the registration system is also required to participate in the initial high-level system review.

The administration staff of registration will provide a person, as required, throughout the project to verify test results and answer questions as they arise. This person will also be responsible for participating in the execution of the acceptance test plan.

The Project Manager will provide final approval and distribution of the release.

16.Schedule:

A sample schedule has been made. The schedule has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan time line. The persons required for each process are detailed in the project time line and plan as well.

Coordination of the personnel required for each task, test team, development team, administrators and the users will be handled by the project manager in conjunction with the development and test team leaders.

Activities	Start	End	Durations In Days
Prepare Test Plan	Day 1	Day 3	3
Review Test Plan	Day 4	Day 5	2
Prepare Test Scripts	Day 6	Day 8	3
Review Test Scripts	Day 9	Day 10	2
Set up Test Environment/Configuration	Day 11	Day 12	2
Establish Test Procedures	Day 13	Day 15	3
Promote Software from Development to Test Environment	Day 16	Day 18	3
Execute Testing/Record Faults	Day 19	Day 24	6
Re-execute Tests as Needed	Day 25	Day 30	6
Provide Support/Resolve Faults	Day 31	Day 35	5

17.Planning Risks and Contingencies:

1.Unnecessary Features or functional requirements:

Some features can be added by the thinking of needs but those features can only interrupt or make disturbance to the user as well students who will be doing the registration. For example, in terms of registration it is not mandatory to fulfill their identification as they are already logged in to the system by their student id and password or some information which could be taken before entering the system or after logged into the system can create chaos in registration if those come during the registration process.

2.Schedule failure:

Since it has a very tight schedule and different types of members are included in it, just because one of member or any kind of feature's task is exceeded from its allocated time can delay the whole schedule.

3.Budget Exceed:

It is a common risk in terms of any project. In the beginning it is very hard to predict the cost of a project to implement. Most importantly every organization wants a better project with less budget and a registration system may look simple to them but after beginning the development or test process some changes may require or some features may need to be added which exceeds its budget.