TEST PLAN

Test plan for: CSE DEPARTMENT

Prepared By: Akib Bin Hossain Feroz

- **Version History**

Version	Date	Change	Author	Approved by
1.0	19.08.2023	Review	Akib Bin Hossain Feroz	

- **Abbreviation List**

Term	Abbreviation
FR	Functional Acquirement
GUI	Graphical User Interface
UAT	User Authentication Testing
NFR	Non-functional Requirement
TBD	To Be Defined
PC	Personal Computer
SSD	Solid State Drive
OS	Operating System
CSE	Computer Science Engineering

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1. Introduction

This project is “CSE Department Website” for Daffodil international University. This website for CSE department students and new applicants.

Only admin can control the website. User can only visit the website, view the information, and apply for admission. This website contains navigation bar, admission button, tuition fee button, eligibility button, scholarship button. In navigation bar it contains logo, home, about us, admission, student, faculty members, contact, search bar, apply online items.

The main goal of this website is to provide information about CSE department and who are interested in CSE they can also easily access to the application section.

2. Reference

Ref. No	Document Title
1.0	CSE DEPARTMENT https://daffodilvarsity.edu.bd/department/cse

3. High Level Test Objectives

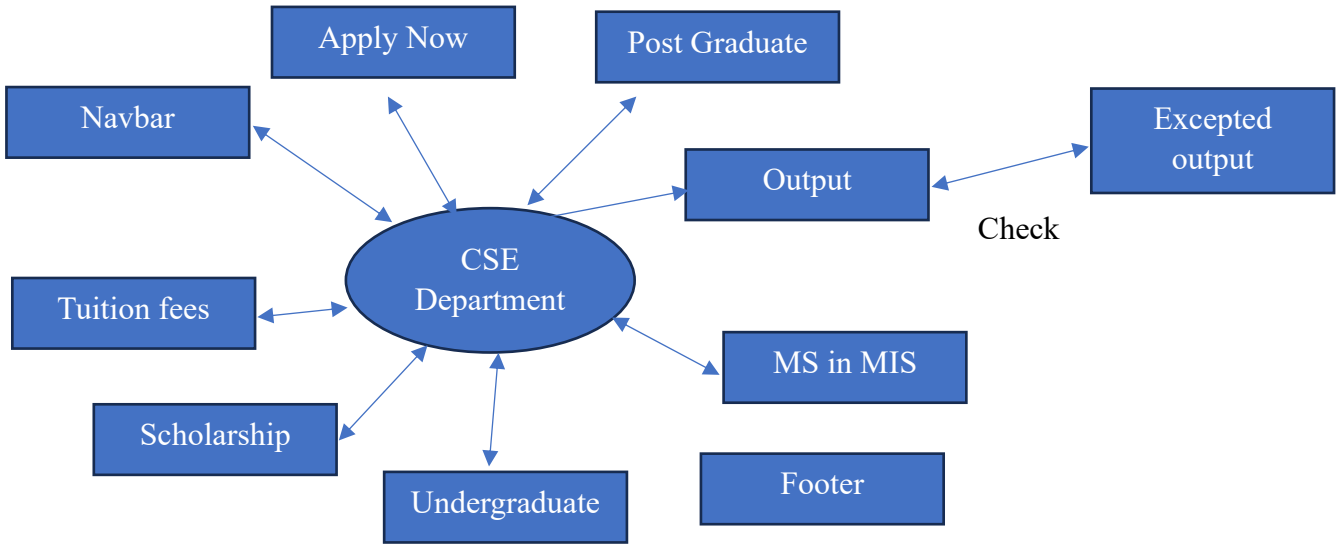
Our high-level goals are to check this website for feature improvement, new feature implementation,

issue fixing, and further maintenance work. We define the following test objectives:

- Ensure the functionality of the application works as expected of Requirement.
- Prevent defects and ensure issue fixing.
- Make sure that the result meets the requirements.
- Gain the confidence of the user by providing them a quality website.
- Ensure that it satisfies the Requirement Specification.
- Gaining confidence in and providing information about the level of quality.

4. Test Strategy

- **UI/UX Testing Strategies**: UI /UX Testing is conducted first after appearing application in QA team to ensure Application UI is match with client requirement and they can use as expected.
- **Functional Testing Strategies**: Functional testing is conducted after preparing test cases for each functional point.



Test Types:

Following types of testing will be conducted to ensure the quality:

Functional Testing:

Functional test will be conducted considering the positive and negative scenario. In this level, to be ensured that target application must meet its Scope Statemen

GUI Test:

This testing will cover application's graphical user interface, to ensure flawless implementation based on UI specification. GUI testing intent to test how the application and the user interact. This includes how the application handles user input and how it displays screen text, images, buttons, menus, dialog boxes, icons, tool bars and more.

Phases	Features/Modules
Sprint 1	1. URL Operation 2. Header operation 3. Slider operation 4. Level Text operation 5. Validation Message operation 6. Spelling Mistake operation 7. Image size operation 8. Footer session 9. Navigation bar 10. All buttons
Note: **Test plan and execution may vary depending on the development progress and release.**	

5. Features to be tested

Phases	Features
Phase-1	1. Navigation bar. 2. Apply online button. 3. Image slider. 4. Undergraduate button. 5. Postgraduate button. 6. MS in MIS. 7. Tuition Fee button. 8. Eligibility button. 9. Scholarship button. 10. Responsiveness on mobile 11. Pop-up chat option 12. Footer

6. Features not to be tested

Phases	Features
Phase-1	1. Integration testing 2. Regression testing

7. Test Estimation

Testing effort may depend on a few factors including:

- Quality of the Test basis
- Duration of course
- Complexity of the problem domain
- Requirements for documentation

8. Release Procedure

Below procedures will be followed for release:

- Step-1: Requirement analysis and preparing test plan.
- Step-2: Start Development
- Step-3: QA continue test case writing, testing, retesting and report bugs.
- Step-4: Developer complete the rest of development and start fixing current sprint Bugs.
- Step-6: Developer complete the rest of development and start fixing current sprint Bugs.
- Step-7: If there do not have any blocking issue and bug Severity is low, Application goes release.

9. Test Suspension Criteria

Testing will be suspended, and QA team will reject the receivables upon the following criteria:

- During testing blocking issue is identified.
- Respective bug is not fixed in dedicated release.
- Release without release note.

Note: If any case will happen then QA have to raise issue to respective stakeholders

10. Test Acceptance Criteria

- Application have covered supported front-end and Back-end both phone and PC.
- Application UI should match UI Specification:

https://daffodilvarsity.edu.bd/department/cse

11. QA Task List and Testing Process

Below Tasks will be performed by the QA Team:

- Requirement analysis.
- Identify Test areas.
- Test Case writing on identified test areas.
- Prepare Test environment.
- Execute Test Cases.
- Perform concurrency testing.
- Bug reporting/retest.
- Deliver Test report.
- Perform Test closure activity.
- Daily morning meeting.
- Spec grooming meeting.

12. Test Environment

To prepare website project followings are the requirement:

Hardware Requirement:

- Laptop (Windows 11)
- Mobile (Android, Redmi 9)

Software Requirement:

- Operating System: Windows 10
- Microsoft Office

Network Requirement:

- Internet connectivity to Laptop /mobile

Tools to be used:

- Test Case management: Microsoft Excel
- Document Management: Google Doc

Device oriented testing will be conducted as per following plan:

Platform	Browser	Device	OS Version	Resolution	Browser	Comments
Mobile	Android-Browser	Mobile	13.1.1	1080 x 700	Lasted build	
Windows	Chrome	Laptop	11	1366 x 2400	Lasted build	

13. Schedule

Schedule will be updated as Sprint feature release:

Sprint	Feature Name	Req. Analysis	No of test Item	Test case design	Internal QA Release	Final Release
Sprint 1	URL Operation	DONE		2	25.9.2023	
Sprint 1	Header operation	DONE		20	25.9.2023	
Sprint 1	Slider operation	DONE		5	25.9.2023	
Sprint 1	Level Text operation	DONE		10	25.9.2023	
Sprint 1	Validation Message operation	DONE		10	25.9.2023	
Sprint 1	A. Spelling Mistake operation B. Image size operation C. Road map session operation D. Cross-platform session operation	DONE		30	25.9.2023	
Sprint 1	A. Up skill training B. Cultivate love session C. Contact session operation D. Footer session	DONE		20	25.9.2023	

Sprint 1	1. Register/ Operation 2. Login Operation 3. Forgot Password Operation 4. Dashboard Operation 5. Application Operation 6. Manage University 7. Operation 8. Technical Skills Operation	DONE		30	25.9.2023	
Sprint 1	1. Banner Slider Operation 2. Fresh Talent Operation 3. Client Operation 4. Course Operation	DONE		35	25.9.2023	

14. QA Summary report

To execute the testing identify the required environment. You need to consider hardware, software, device, network, tools and other issues here to prepare the test bed.

Phase	Sprint	URL
1st Release	Sprint 1	N/A

15. Roles and Responsibilities

Resource Name	Responsibilities
Akib Bin Hossain Feroz	**Intern**

16. Risk and Contingencies

Schedule:

- Complete Design is not providing yet.
- Any changes to the requirements / scope could affect the test schedule.

Testing:

- Application may have side effects due to implementation of new features and function.
- enhancement and this may affect to the functionality of existing feature due to lack of
- proper testing time.
- Mitigation can be the proper testing scope, testing time.

Application Risk:

- Application may behave abnormally, and major functions may not work in non-supported devices/interfaces. Application may also not work unexpectedly in latest browsers for which application is not modified and tested.

17. Test Exit Criteria

Matric/Attribute	Formula	Objective			
		Sprint Release	Alpha Release	Beta Release	GM Release
Failed Test Cases Percentage	(Number of Failed Tests/Total number of tests executed) X 100	30%	10%	5%	0%
Blocked Test Cases Percentage	(Number of Blocked Tests/Total number of tests executed) X 100	10%	5%	0%	0%
Defects Deferred Percentage	(Defects deferred for future releases /Total Defects Reported) X 100	30%	10%	2%	0%
Blocker Defects Percentage	(Block Severity Defects / Total Defects Reported) X 100	2%	1%	0%	0%
Critical Defects Percentage	(Critical Defects / Total Defects Reported) X 100	0%	0%	0%	0%
Major Defects Percentage	(Major Severity Defects / Total Defects Reported) X 100	50%	30%	20%	0%
Minor Severity Defects Percentage	(Minor Severity Defects / Total Defects Reported) X 100	100%	50%	30%	0%
Trivial Severity Defects Percentage	(Trivial Severity Defects / Total Defects Reported) X 100	100%	80%	50%	0%

18. Defect Severity Definition

Classification	Definition
Blocker	Blocker defects are those which blocks to conduct other test cases and need to recover test execution work more than 0.5 man day.
Critical	Critical defects are those which results in the failure of the complete software system, of a critical subsystem so that no work or testing can be carried out after the occurrence of the defect. It also applies to data loss failures and with processes that leave inconsistent data stored on the database.
Major	Major defects are those which also causes failure of entire or part of system, but there are some processing alternatives which allows further operation of the system. It also applies to the system crashing, or aborting, during normal operation of a non-critical flow.
Minor	Minor defects do not result in failure but causes the system to show incorrect, incomplete, or inconsistent results. A critical usability issue fits also in this category, as well as if there is a simple workaround.
Trivial	Trivial defects are small errors that do not prevent or hinder functionality, typos, grammar mistakes, wrong terminology, general usability issues and styling.

19. Bug Status Explanation

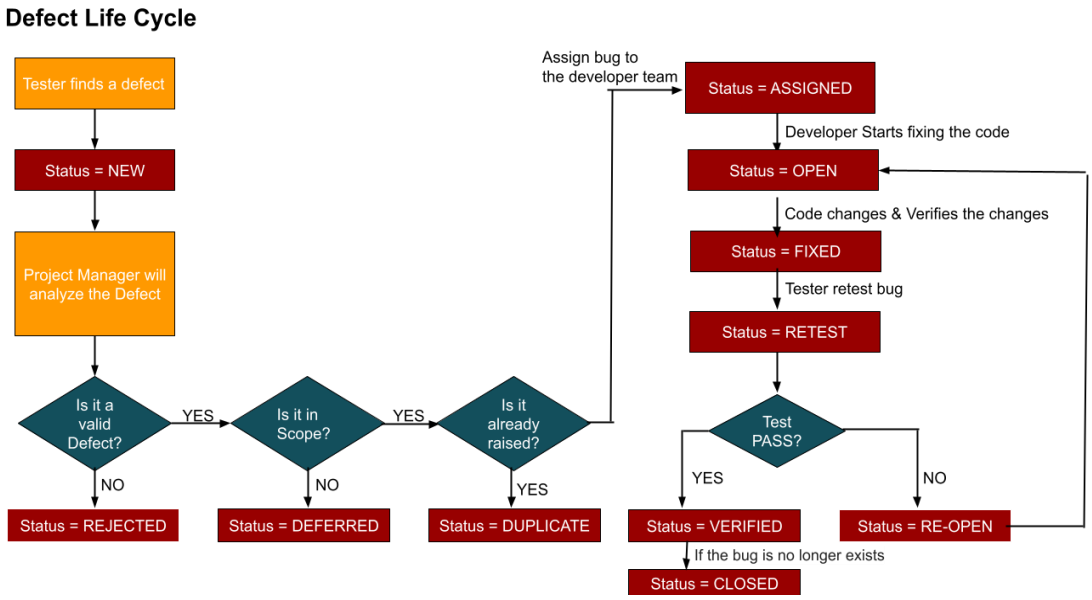
We maintain following status of the **Bug** in our **Test Execution** report:

New: When a new defect is logged and posted for the first time. It is assigned a status as NEW.

Assigned: Once the bug is posted by the tester, the Project Manager will approve the bug and assigns bug to the developer team.

Open: The developer starts analysing and works on the defect fix.

Fixed: When a developer makes a necessary code change and verifies the change, this status means that the issue is fixed.



Re-test: Tester does the retesting of the code at this stage to check whether the defect is fixed by the developer or not and changes the status to "Re-test".

Verified: The tester re-tests the bug after it got fixed by the developer. If there is no bug detected in the software, then the bug is fixed, and the status assigned is "verified".

Re-open: If the bug persists even after the developer has fixed the bug, the tester changes the status to "Re-Open". Once again, the bug goes through the life cycle.

Closed: If the bug is no longer exists then the tester assigns the status "Closed".

Duplicate: If the defect is repeated twice or the defect corresponds to the same concept of the bug, the status is changed to "duplicate".

Rejected: If the developer feels the defect is not a genuine defect, then it changes the defect to "rejected".

Deferred: If the present bug is not of a prime priority and if it is expected to get fixed in the next release, then status "Deferred" is assigned to such bugs.

20. Test Deliverables

Followings are the deliverables from QA for **BJIT Academy website** project:

Test Deliverables before Testing:

- Test Plan
- Test Cases

Test Deliverables after Testing:

- Test execution report
- QA report (each sprint)
- Bug Report

Note: Known issues are well mentioned in each sprint release note.

21. Test Plan Approvals

Name	Roles	Signature	Date