Test Plan Report

Group:28

Project: Student Management System

Date: 30th November 2023

1. Introduction:

The purpose of this test plan is to outline the testing approach and strategies for the Student Management System project. The goal is to ensure that the system functions correctly, meets the specified requirements, and provides an efficient management solution for students and administrators.

2. Test Objectives:

The main objectives of the testing effort are as follows:

- Validate the functionality of the Student Management System.

- Identify and report any defects or issues.

- Ensure data integrity and accuracy in student records.

- Verify the system's performance and scalability.

- Validate the security measures implemented.

3. Test Scope:

The testing will cover the following areas of the Student Management System:

- User authentication and access control.

- Grade calculation

- functional buttons

- users record management

4. Test Approach:

The testing will follow a combination of manual and automated approaches. The test team will identify and prioritize test cases, execute them, and report any defects found. The testing will be performed in multiple phases, including functional testing, integration testing, performance testing, and security testing.

5. Test Environment:

The test environment will consist of the following:

- Operating System: Windows 10

- Web Browsers: Chrome

- Database: MySQL 8.0

- Hosting: Apache 3.3.0

6. Test case

-Login/Logout

Success for every user role

- Grade calculation

GPA calculated correctly.

- functional buttons

All buttons and links are functioning.

- users record management

All the CRUD functions work fine,including users add/drop/update/delete and course add/drop/delete

7. Defect system

Defect Categories:

User permission teacher cannot edit the student gpa.

Flexible Grade calculation can make more detail for example the grade of exam assignments, project.

Add auto calculation in the record system.

The function of the project can be improved.

Severity Levels:

Low: The project is almost finish. Minor issues defect that do not significantly affect system functionality.

Security level

Low:

Provide data backup and recovery(user information)

Data encryption (sensitive data)

Secure Coding Practices (SQL injection , cross -side scripting)