

Task 3: Create and Execute the test cases for the real world scenarios like student management system.

Student Management System Test Cases

Scenario:

You are a manual tester for a school that has recently implemented a new student management system. The system is designed to allow teachers and administrators to manage student information, enrollments, grades, and attendance records. Your task is to test the system to ensure that it is functioning correctly and meets the requirements of the school.

Functional Test Cases:

Student Enrollment:

- a. Verify that a new student can be enrolled in the system by entering their personal information (name, date of birth, address, etc.) and assigning them to a grade level and homeroom teacher.
- b. Verify that the system displays an error message if the user enters invalid or incomplete information, such as a missing date of birth or an invalid address.

Class Management:

- a. Verify that teachers and administrators can manage classes by adding, editing, and deleting class schedules, as well as assigning students to specific classes.
- b. Verify that the system displays an error message if the user tries to add a duplicate class or assign a student to a class that is already full.

Attendance Tracking:

- a. Verify that teachers can record student attendance by marking them present, absent, or tardy for each class period.

b. Verify that the system tracks attendance records accurately and displays attendance reports that can be viewed by administrators and parents.

Grade Management:

a. Verify that teachers can enter and update student grades for each class assignment and test.

b. Verify that the system calculates grades accurately and displays grade reports that can be viewed by administrators and parents.

Student Information Management:

a. Verify that administrators can manage student information by updating personal information, managing enrollment, and generating reports.

b. Verify that the system displays accurate student information and reports, and can generate reports based on specific criteria, such as grade level or academic performance.

User Access and Security:

a. Verify that the system allows access to appropriate users (teachers, administrators, parents) and restricts access to unauthorized users.

b. Verify that the system provides secure access to student information and maintains data privacy and confidentiality.

Performance and Compatibility:

a. Verify that the system is scalable and can handle a large number of students, classes, and users without slowing down or crashing.

b. Verify that the system is compatible with different browsers and devices, such as Chrome, Firefox, Safari, and Edge, and mobile devices such as iOS and Android.

These functional test cases will help ensure that the student management system is functioning correctly and meets the requirements of the school.

Scenario 1: Add a New Student

- 1. Verify that a new student can be added with valid student information**
- 2. Verify that the student ID generated is unique and follows the expected format**

Scenario 2: Update Student Information

- 1. Verify that student information can be updated with valid information**
- 2. Verify that the updated information is correctly reflected in the student details**

Scenario 3: Enroll in a Course

- 1. Verify that a student can be enrolled in a course with a valid course code and semester**
- 2. Verify that the student's course list is correctly updated after enrollment**
- 3. Verify that an error is displayed if the course code or semester is invalid**

Scenario 4: Grade Submission

- 1. Verify that grades can be submitted for a student in a course with valid information**
- 2. Verify that the grade is correctly updated in the student's course list**
- 3. Verify that an error is displayed if the grade information is invalid or incomplete**

These are just some sample test cases for each system. More test cases may be required based on the specific requirements and features of the system being tested.