**Classroom Robot Test Plan**

Test Plan Identifier

References

Introduction

The Classroom Robot application will support:

1. Teacher administration services.
2. Offer concise reports on student grades and attendance.
3. List exercises students are enrolled into

Software Project Management Tools

1. GitHub will be the primary source of source control. GitHub offers extensive source control for free, allowing us to use out budget effectively elsewhere. GitHub is also an easy to use source control, which will aid the efficiency of this project.
2. Google Drive as the collaboration tool, will allow us to work together in collaboration on supporting documents, this will in-turn, increase productivity and decrease any confusion, resulting in a much faster produced project.
3. Microsoft Project will be our chosen Project Management tool. Most people are familiar with Microsoft software, which will assist in production time.

Methodology

Our chosen methodology will be Agile. Agile will allow us to focus less on documentation and more on delivery time, resulting in a quicker finished product.

Test Items

The systems to be tested will be back-end logic and database integration. These systems will be tested in the common internet browsers. Firefox, Chrome and Internet Explorer.

This application will be tested in a Microsoft Windows environment.

Features to be Tested

Features to be tested include the following:

* Logging into the application as a teacher
* Editing students in the application
* Viewing students in the application
* Creating students in the application
* Editing exercises in the application
* Viewing exercises in the application
* Creating exercises in the application
* Viewing student attendance reports
* Viewing student grade reports

Features Not to be Tested

The application will not be tested on mobile devices. Only web browsers available on computers will be supported.

Approach

All tests will be conducted as per the documented test cases. The test manager will create test runs for each tester where they will execute these tests and mark each case as Pass/Fail/Skip. The testers take detailed notes about the results or any other relevant details. Testers for this project are the developers and because of this, any testing completed by the developer will be done on functions or features they did not create.

Pass/Fail Criteria

All core functionality of the systems should function as expected and outlined in the individual test cases. There must be no critical defects found and an end user must be able to complete the required functions without any errors. 95% of all test cases should pass and no failed cases should be crucial to the end-user’s ability to use the application.

Suspension Criteria

Testing should be paused immediately if either system experiences login issues or failure in any basic database actions

Test Deliverables

When testing is complete, all results will be recorded and saved where the test manager can then review the findings.

Testing Tasks

The following activities must be completed:

●    Test plan prepared.

●    Functional specifications written and delivered to the testing team

●    Environment should be ready for testing (test data, test logins, etc).

●    Perform the tests.

●    Prepare test summary report

Environmental Needs

The test application must be in a test environment and have access to a test database. This database must contain data that is relevant to the test being conducted. For example, a list of real drugs would be needed for running checks of medicine cocktails.

Responsibilities

The Test Manager is responsible for facilitating the testing project. Each tester should understand the expectations on completion date and level of quality. The Test Manager should also communicate any risks to the team.

Staffing and Training Needs

Testing will be conducted by all developers working on the project. No additional training should be required.

Schedule

Testing will take place 3 days before the project is due. A round of testing will be completed each day leading up to the due date.

Risks and Contingencies

There is no flexibility in the due date of this project, so if the testing is not completed within the 3 days prior to the due date, no bug fixes will be able to be applied. This will affect the overall function of the application.

Approvals

The test manager and product manage both must agree on completion of the testing project and determine when it’s ready to proceed to the next step.