Sprint 2

**Test Plan for ABC**

**Test Plan Identifiers**

Sprint 2 test plan for ABC school version 0.1.

**References**

For reference we have the following document:

* Mockups
* Requirement document

**Introduction**

**Purpose**

The purpose of this document is to assist the team in understanding the requirements and building the functionality accordingly. This document also describes the in scope and out of scope along with the testing strategy and approach. This document also talks about the risks and assumptions associated with the project. The document recommends the testing strategy to be implemented.

**Project Overview**

The system provides easy access to view the records of the students.

ABC school wants the administration to analyze the records of the students and help them in knowing how a student is performing, the overall information of the students, who require more focus, and what measures could be taken to improve the grades of the students. It also helps to identify how students are performing in their exams and who are weak in their studies. It will help them to know which students need extra classes or tuition, and which students will get awards or scholarships based on their performance.

This system is important because it will allow the school to plan their activities so that they help their students in improving their studies. The aim of developing this system is to help the administration in analyzing the details and help the school to take actions to improve their education system.

**Test Items**

* The login page.
* The dashboard.
* The student detail display page.
* The CSV file generator.

**In scope**

***Functional Testing***

The system is tested against the functional requirements or specification.

***UI***

Check the design. Check the display of logo is properly aligned or not. Check the picture of the students.

***Smoke Testing***

Before beginning any other tests smoke testing is performed to check if the critical functionalities are working or not.

***Sanity Testing***

It is performed before regression testing to see if the major functionalities are working properly or not. Search button

***User Acceptance Testing***

After the system is developed it is tested by QA and clients to see if their requiremets are met.

***Regression Testing***

It is done to check that the newly added functionality doesn’t affect the performance of the previously working functionalities.

**Features to be tested**

* The administrator can login the system using his credentials .
* All the details of the students needs to be shown as the administrator logins in.
* The administrator should be able to search student information by giving the name and score input in the search field.
* The scores must be allowed to be sorted in both ascending and descending order.
* The individual details of the students can also be exported in csv format.
* The reset button should reset the previously entered data when the button is pressed. The pagination button must work.

**Out of scope**

* Stress testing is not required.
* Load testing is not required.

**Testing strategy**

***Functional Testing***

Functional testing is done using black box technique with the use of positive and negative inputs to check their outcomes with expected results.

.***UI***

UI is tested manually by the testers and can be done using automation tools.

***Smoke Testing***

We use decision tree for testing the login page. We use various combinations of input to test the system such as Valid username and valid password, valid username and invalid password, invalid username and valid password and so on.

***Sanity Testing***

The functionality of the system is tested by preparing test cases and validating them.

***User Acceptance Testing***

It is done by conducting feedback session and meeting before moving to production.

***Regression Testing***

It is done manually to test whether a module has an effect on another previously working model. Some automation tools can also be used such as Katalon Studio.

**Testing environment**

|  |  |
| --- | --- |
| Browser | Chrome, Safari, Firefox, Opera, Internet Explorer |
| Operating System | Windows, Linux, IOS |
| Version | Windows 10, 8, MacOs Catalina |

**Risks**

|  |  |  |  |
| --- | --- | --- | --- |
| Risk | Impact | Probability | Mitigation Plan |
| Change in requirements | High | Medium | Need to communicate the requirements with the clients. |
| Test data insufficient. | High | High | Choose sample data from actual DB data. |
| Test data might not cover all scenarios. | High | High | Data validation needs to be done with the clients. |

**Assumptions**

* All the students' information is correct and up to date.
* The administrator doesn’t need to update or delete the student information.

**Test Deliverables**

* Test plan
* Test cases
* Bug report
* Summary report

**Bug Report**

The bug report tracks all the bugs discovered while executing the test cases. It helps the developers to know where the bugs have occured and their priority along with the steps to reproduce.