**Youxcel Task**

Q1: Mobile Survey System web

Q1.1)

There are missing requirements:

1. The requirements did not define if the questions of the survey all of them are mandatory or not and the candidate can submit the survey without filling some questions?
2. Should there be any validation rules or constraints applied to the candidate textual answers like maximum number of characters
3. Will there be a login system with usernames and passwords?
4. How will the surveys be distributed to people's mobiles? Will there be a mobile application or will the surveys be sent via SMS or email?
5. How the people will get the survey, will there be a mobile application or will the surveys be sent via SMS or email?
6. Where The Administrators can view the audit log? Is there is any stored files or database?
7. What are permissions for stuff members?
8. Can the staff member edit the survey after creation or not?
9. Can the staff member delete any surveys?
10. Is there is a state for the survey when closing it before or after the closing date?

Q1.2)

Design test cases so that they shall include:

a- happy case scenario for each requirement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| precondition | Test Cases | Expected result | ID |  |
| Login with admin credentials | Verify that the admin can to create new staff member and assign permissions to him | Admins can create new staff successfully and can assign permissions as expected | 01 |  |
| Login with staff credentials | Verify that staff members can access the back-office web interface and can use the allowed permissions | Staff members could to access the web interface and use the allowed permissions successfully | 02 |  |
| Login with staff credentials | Verify that the survey successfully created with all choices and questions and closing date | Survey should be created with all information as expected | 03 |  |
| Login with staff credentials | Submit multiple responses to a survey and verify that the submission count is updated accurately for that survey. | The survey submitted and added to submitting count successfully | 04 |  |
| Login with staff credentials | Verify that the percentage of each candidate answer submission is calculated correctly and displayed for each survey. | The percentage should be calculated successfully for each survey | 05 |  |
| Login with staff credentials | Verify that staff members can manually close a survey before its closing date, and the survey status is updated after closing the survey | Survey can be closed before the closing date and the statues of the survey should be changed | 06 |  |
| Login with admin credentials | Verify that the audit log captures and displays all activities | All audits logged and displayed successfully for the admin | 07 |  |
| Login with admin credentials | Verify that administrators can access the audit log. | Admin should be able to access the audit log | 08 |  |
| Login with staff credentials | Verify that staff members can view the total number of submissions for each survey. | Staff members can view numbers of surveys successfully | 09 |  |

b- all the possible alternate scenarios:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| precondition | Test Cases | Expected result | ID |  |
| Login with staff credentials | Verify if the staff members can do another task out of the permissions scope | Staff members should not be able to access any task out of the permissions scope | 01 |  |
|  | Check the survey after passing the closing date if it still able to fill | Should be closed after passing the closing date | 02 |  |
|  | Verify that users cannot submit responses after the survey's closing date. | Should not be able to submit after closing date | 03 |  |
|  | Verify that the submitted answers are displayed correctly for each survey. | All data should be submitted successfully | 04 |  |
|  | Verify that an error message is displayed indicating the required fields. | An error message should be display when submitting survey with empty questions | 05 |  |
|  | Verify what might happen when falling the service while submitting the survey | An error screen should be display with “please try again later” | 06 |  |
| Login with admin credentials | Check the database after submitting a survey | All submitted data should be saved in database | 07 |  |
|  | Verify that only administrators can access and manage the audit log | The admin only should can access the audit log | 08 |  |
| Login with admin credentials | Verify that an error message is displayed for invalid or duplicate staff member details. | The staff members details should be unique | 09 |  |
| Login with staff credentials | Attempt to create a survey without entering a question or candidate answers | The survey cannot create without the required information. | 10 |  |

Q1.3)

Log the defects that are most likely to be detected in error-prone areas:

1. The staff members can access the audit log which is not allowed permission
2. The system fails to validate input fields when creating surveys, allowing for empty or invalid data
3. The system calculates submission statistics incorrectly, leading to inaccurate numbers or percentages
4. The system doesn’t save the responses of the survey in audit log or database
5. The admin cannot be create stuff members accounts

Q1.4)

After completing your test cycle, show how would you report the test results summary to your

team

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | Description | Steps | Expected | Actual | priority | severity | Test environment | Attachment |
| 01 | The staff members can access the audit log which is not allowed permission | 1. Login to the system with staff member credentials 2. Open the audit log | The audit log cannot be accessed by staff member, he only can access the assigned permissions | The stuff member accessed the audit log | high | high | Web interface | screenshot |
| 02 | The system fails to validate input fields when creating surveys, allowing for empty or invalid data. | 1. Open the survey 2. Add not valid data and don’t fill all fields and question 3. Submit the survey | The system doesn’t accept the response and display error message please fill all required fields and enter valid data | System accepts the missing fields and there is no validation on the survey questions | high | low | Web interface | screenshot |
| 03 | The system calculates submission statistics incorrectly, leading to inaccurate numbers or percentages | 1. Login to the app as staff member 2. Open the statistics page of the surveys 3. Check the percentage and the statistics | The percentage calculated successfully and the statistics successfully too | The percentage calculated incorrectly and the statistics incorrectly too | high | high | Web interface | screenshot |
| 04 | The system doesn’t save the responses of the survey in audit log or database | 1. Login with admin credentials 2. Open the audit log 3. Check the log | All responses saved and displayed successfully in audit log page | The log page is empty | high | high | Web interface | screenshot |
| 05 | The admin cannot be create stuff members accounts | 1. Login with admin credentials 2. Try to create stuff member accounts | Admin should be allowed to create stuff member accounts and assign some permissions for them | Admin not allowed to create stuff member account | high | high | Web interface | screenshot |

Q2: Hybrid mobile application

1-

**Scenario:** Anonymous user cannot download more than 3 books

**Given** the mobile application is opened

**And** the user is not logged in

**When** the user attempts to download more than 3 books

**Then** the user should see a message indicating the download limit has been reached

**And** the user should not be able to download additional books

2-

**Scenario:** Testing the performance of the application while the battery dies

**Given** the mobile application is running

**And** the battery level is critically low

**When** the battery level reaches a critical threshold

**Then** the application should gracefully handle the low battery situation

**And** the application should not crash or exhibit abnormal behavior

3-

**Scenario:** Checking the sorting of the latest 10 books

**Given** the mobile application is opened

**And** the latest 10 books are displayed

**When** the books are sorted based on the release date

**Then** the books should be arranged in descending order of release date

**And** the first book should be the most recently released book

Q3: In a SQL database there are three tables students, books and renting history

**write a sql query to return (Student name, Book name and Renting date) to show the history**

**of books renting by the students:**

SELECT Table1. Student \_Name AS Student\_Name, Table2.Book\_Name AS Book\_Name , Table3.Rent\_Date AS Rent\_Date

FROM Table1

JOIN Table3 ON Table1.Student\_ID = Table3.Student\_ID

JOIN Table2 ON Table2.Book\_ID = Table3.Book\_ID;

2) **write a sql query to return (Student name, number of rented books) to list the students who rent more than one book.**

SELECT Table1.Std\_Name AS Student\_Name, COUNT (Table3.Book\_ID) AS Number\_of\_Rented\_Books

FROM Table1

JOIN Table3 ON Table1.Student\_ID = Table3.Student\_ID

GROUP BY Table1.Std\_Name

HAVING COUNT (Table3.Book\_ID) > 1;

Q4: API testing

- Referring to https://petstore.swagger.io/#/pet, You ‘re asked to design test cases for 4 apis with

different methods (post - get - put - delete) .

**Check the postman collection uploaded on github link**