Just like programming, you must have Test your application.

You may submit your **Test-Plan** and **Test-Cases** in the following format.

**Software Test Plan**

Test Plan is the **sub-set** of the whole plan you had submitted earlier.

Although it has **more details** in terms of activities of the software testing your would do on your FYP.

For example if your software application has **10-Screens** and **8-Reports** in it.

Assume your estimation of efforts is approximately half day per screen / report

| **S. No** | **Description** | **Test Engineer** | **Start Date** | **End Date** |
| --- | --- | --- | --- | --- |
| 1 | Validate user login with correct credentials | Emaan | 01-may-2025 | 03-may-2025 |
| 2 | Check User knowledge related to cybersecurity | Hafsa | 4-may-2025 | 6-may-2025 |
| 3 | Submit behavioral questionnaire | Farwah | 07-may-2025 | 09-may-2025 |
| 4 | Predict user risk based on input | Farwah | 13-may-2025 | 15-may-2025 |
| 5 | Admin creates and updates questionnaire | Farwah | 16-may-2025 | 18-may-2025 |
| 6 | Display compliance dashboard with correct data | Hafsa | 19-may-2025 | 21-may-2025 |
| 7 | Test multi-factor authentication login | Emaan | 21-may-2025 | 24-may-2025 |
| 8 | Data storage and retrieval from MySQL | Farwah | 24-may-2025 | 10-june-2025 |
| 9 | Suggesting the correct domain based on user knowledge | Hafsa, Farwah | 10-june-2025 | 15-june-2025 |
| 10 | Perform regression testing across modules | All Team Members | 15-june-2025 | 20-june-2025 |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 01

Module Name: User Login Date: 1-may-2025

Test Case ID: TC-UL-001 Test Engineer: Emaan

Test Case Description: Verify login screen behavior with valid and invalid credentials.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | **Steps** | **Input Data** | **Expected**  **Result** | **Actual**  **Result** | **Pass/Fail** |
| 1 | Launch login screen Press **[Enter]** button | none | Login form appears | As expected | Pass |
| 2 | Enter valid email and password | Valid credentials | Redirect to Home page | As expected | Pass |
| 3 | Enter invalid credentials | Incorrect email/password | Error: "Invalid credentials" | As expected | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 02

Module Name: Cybersecurity Knowledge Assessment Date: 4-may-2025

Test Case ID: TC-CKA-002 Test Engineer: Hafsa

Test Case Description: Verify that the system accurately **presents the cybersecurity knowledge assessment** to the user, accepts valid responses, and correctly evaluates the answers. The platform should then **store the user's score**, analyze the level of cybersecurity understanding, and **provide feedback or learning suggestions** based on the assessment results.

| **S. No** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Navigate to knowledge assessment section | Logged-in user | Cybersecurity questionnaire page is displayed | Page loaded correctly | Pass |
| 2 | Attempt all questions | User selects answers (MCQs, TF, etc.) | Inputs are accepted and validated | Inputs accepted | Pass |
| 3 | Submit completed answers | Fully answered questionnaire | System analyzes and stores the knowledge score | Score generated and saved | Pass |
| 4 | View top suggested domains | Submitted responses | System provides improvement areas | Shown as expected | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 03

Module Name: Behavioral Questionnaire Date: 7-may-2025

Test Case ID: TC-BQ-003 Test Engineer: Farwah

Test Case Description: Verify that the questionnaire module loads correctly, accepts valid responses, saves data properly, and handles empty submissions with appropriate error messages.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | **Steps** | **Input Data** | **Expected**  **Result** | **Actual**  **Result** | **Pass/Fail** |
| 1 | Open questionnaire page | none | Questionnaire form loads | As expected | Pass |
| 2 | Fill and submit answers | Sample responses | Sample responses | As expected | Pass |
| 3 | Leave answers blank and submit | Empty Forms | Error prompt appears | As expected | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 04

Module Name: Risk Prediction Date: 13-may-2025

Test Case ID: TC-RP-004 Test Engineer: Farwa

Test Case Description: Ensure the ML model correctly calculates risk scores from complete user data and handles incomplete datasets by returning appropriate errors or null results.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | **Steps** | **Input Data** | **Expected**  **Result** | **Actual**  **Result** | **Pass/Fail** |
| 1 | Submit user data to ML model | Questionnaire dataset | Risk score generated | As expected | Pass |
| 2 | Submit incomplete dataset | Partial data | Error or null risk score returned | As expected | Pass |

**Test Case**

Project Name: Behaviorance-I Iteration No: 05

Module Name: **Admin Questionnaire Management** Date: 16-may-2025

Test Case ID: TC-AQM-005 Test Engineer: Farwah

Test Case Description: Verify that when the admin performs **direct modifications to the questionnaire database** (e.g., adding or updating questions using SQL queries), the **changes are accurately reflected on the frontend** without requiring a manual refresh. Additionally, ensure that **questions deleted** from the backend via panel commands are **immediately removed from both the database and the user interface**, maintaining consistency between data and display.

| **S. No** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Admin directly modifies DB content (e.g., adds question) | SQL update query | Updates appear on frontend without refresh | Reflected correctly | Pass |
| 2 | Admin deletes a question from DB If don’t have foreign key in table | Delete command via panel | Question removed from both DB and frontend | Successfully removed | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 06

Module Name: Dashboard Date: 19-may-2025

Test Case ID: TC-BQ-006 Test Engineer: Hafsa

Test Case Description: Verify that when a user opens the **Dashboard**, their **previous questionnaire responses** are displayed accurately and in a detailed format. The dashboard should reflect **historical data** retrieved from the database without any delay or data mismatch. This ensures that users can **track their progress over time** effectively.

|  | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Open Dashboard | User history | Detailed past responses and scores visible | Working as expected | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 07

Module Name: Dashboard Date: 19-may-2025

Test Case ID: TC-MFA-007 Test Engineer: Emaan

Test Case Description: Verify that the login process functions correctly using **multi-step authentication**, including **email/password verification** and **OTP-based validation**. When a user enters valid credentials, the system should **prompt for a 6-digit OTP**. Upon entering the **correct OTP**, access should be granted and the user should be redirected to the **dashboard**. If the OTP is incorrect, the system must display a clear **“Invalid OTP”** error without proceeding further.

| **S. No** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Enter email and password | Valid login credentials | Prompt for OTP | OTP screen shown | Pass |
| 2 | Enter correct OTP | Correct 6-digit OTP | Login successful | Dashboard loaded | Pass |
| 3 | Enter incorrect OTP | Invalid OTP | Show “Invalid OTP” error | Error message displayed | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 08

Module Name: **Database Integration (MySQL)** Date: 19-may-2025

Test Case ID: TC-DI-008 Test Engineer: Emaan

Test Case Description: Verify that users can **submit questionnaire responses**, the data is correctly **stored in the MySQL database**, and that users can later **retrieve or delete** their responses. The system must ensure that data integrity is maintained and that deleted records are **immediately removed from both the dashboard and the database**.

| **S. No** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Submit a new questionnaire | Filled survey responses | Data stored in MySQL | Verified in DB | Pass |
| 2 | Retrieve past responses | User ID | Load stored results on dashboard | Responses shown correctly | Pass |
| 3 | Delete a response | Record ID | Record deleted successfully | No longer visible | Pass |

**Test Case** (for screen/reports)

Project Name: Behaviorance-I Iteration No: 09

Module Name: Full System Regression Date: 19-may-2025

Test Case ID: TC-REG-009 Test Engineer: Farwah, Emaan, Hafsa

Test Case Description:

| **S. No** | **Steps** | **Input Data** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| 1 | Test login, dashboard, domains | Various module inputs | All modules work as before | All modules passed | Pass |
| 2 | Re-test bug fixes | Updated components | Previously reported issues resolved | Confirmed fixed | Pass |

**TC-1** - is Test case # 1 for Screen/report you are doing.

You may have **numbers of test-case** against one screen or report depending upon its complexity.

**Steps -** you follow to enter the input-data on that screen/report. First-value, second-value and so on

**Input-Data** – **actual value** of the input-data on that screen

Mention does that Test **pass or fail**