**Software Test Plan**

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

Project Name: \_\_ **INTEGRA GUARD SURVEILLANCE SYSTEM** \_

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## Test Cases Document

**Test Case 1: User Registration**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-01 |
| Title | User Registration |
| Description | Verify that a new user can register with valid credentials. |
| Preconditions | User is on the registration page. |
| Steps | 1. Enter a valid email and password.<br>2. Click the "Register" button. |
| Expected Result | User account is created, and a confirmation email is sent. |
| Actual Result | SUCCESS |

*Table 5-1*

**Test Case 2: User Login**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-02 |
| Title | User Login |
| Description | Verify that a registered user can log in with correct credentials. |
| Preconditions | User is registered and on the login page. |
| Steps | 1. Enter valid email and password.<br>2. Click "Login". |
| Expected Result | User is logged in and redirected to the dashboard. |
| Actual Result | SUCCESS |

*Table 5-2*

**Test Case 3: Invalid Login**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-03 |
| Title | Invalid Login |
| Description | Verify that login fails with incorrect credentials. |
| Preconditions | User is on the login page. |
| Steps | 1. Enter valid email and incorrect password.<br>2. Click "Login". |
| Expected Result | Error message is displayed, login is denied. |
| Actual Result | ERROR |

*Table 5-3*

**Test Case 4: Add Camera**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-04 |
| Title | Add Camera |
| Description | Verify that a user can add a new camera. |
| Preconditions | User is logged in and on the camera management page. |
| Steps | 1. Enter camera details.<br>2. Click "Add Camera". |
| Expected Result | Camera appears in the user’s camera list. |
| Actual Result | SUCCESS |

*Table 5-4*

**Test Case 5: Weapon Detection (Knife)**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-05 |
| Title | Weapon Detection (Knife) |
| Description | Verify that the system detects a knife in the video feed. |
| Preconditions | User is logged in, camera is active, and dashboard is open. |
| Steps | 1. Place a knife in the camera’s field of view.  2. Observe dashboard. |
| Expected Result | Detection overlay appears, alert is triggered, notification is sent. |
| Actual Result | SUCCESS |

*Table 5-5*

**Test Case 6: Weapon Detection (Gun)**

|  |  |
| --- | --- |
| Test Case ID | TC-06 |
| Title | Weapon Detection (Gun) |
| Description | Verify that the system detects a gun in the video feed. |
| Preconditions | User is logged in, camera is active, and dashboard is open. |
| Steps | 1. Place a gun in the camera’s field of view.  2. Observe dashboard. |
| Expected Result | Detection overlay appears, alert is triggered, notification is sent. |
| Actual Result | SUCCESS |

*Table 5-6*

**Test Case 7: False Positive Handling**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-07 |
| Title | False Positive Handling |
| Description | Verify that harmless objects do not trigger weapon alerts. |
| Preconditions | User is logged in, camera is active. |
| Steps | 1. Place a harmless object (e.g., pen) in the camera’s view.<br>2. Observe dashboard. |
| Expected Result | No detection overlay or alert is triggered. |
| Actual Result | SUCCESS |

*Table 5-7*

**Test Case 8: Push Notification Delivery**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-08 |
| Title | Push Notification Delivery |
| Description | Verify that notifications are sent to all registered devices upon detection. |
| Preconditions | User is logged in on multiple devices, camera is active. |
| Steps | 1. Trigger a weapon detection event.<br>2. Observe all devices. |
| Expected Result | All devices receive a push notification. |
| Actual Result | SUCCESS |

*Table 5-8*

**Test Case 9: Detection Log Retrieval**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-09 |
| Title | Detection Log Retrieval |
| Description | Verify that users can view detection history in the dashboard. |
| Preconditions | User is logged in, detection events have occurred. |
| Steps | 1. Navigate to detection history page.<br>2. Review the log. |
| Expected Result | Accurate list of past detections is displayed. |
| Actual Result | SUCCESS |

*Table 5-9*

**Test Case 10: Unauthorized Access Attempt**

| **Field** | **Details** |
| --- | --- |
| Test Case ID | TC-10 |
| Title | Unauthorized Access Attempt |
| Description | Verify that unauthenticated users cannot access the dashboard. |
| Preconditions | User is not logged in. |
| Steps | 1. Attempt to access dashboard URL directly. |
| Expected Result | Access is denied, user is redirected to login page. |
| Actual Result | SUCCESS |

*Table 5-10*