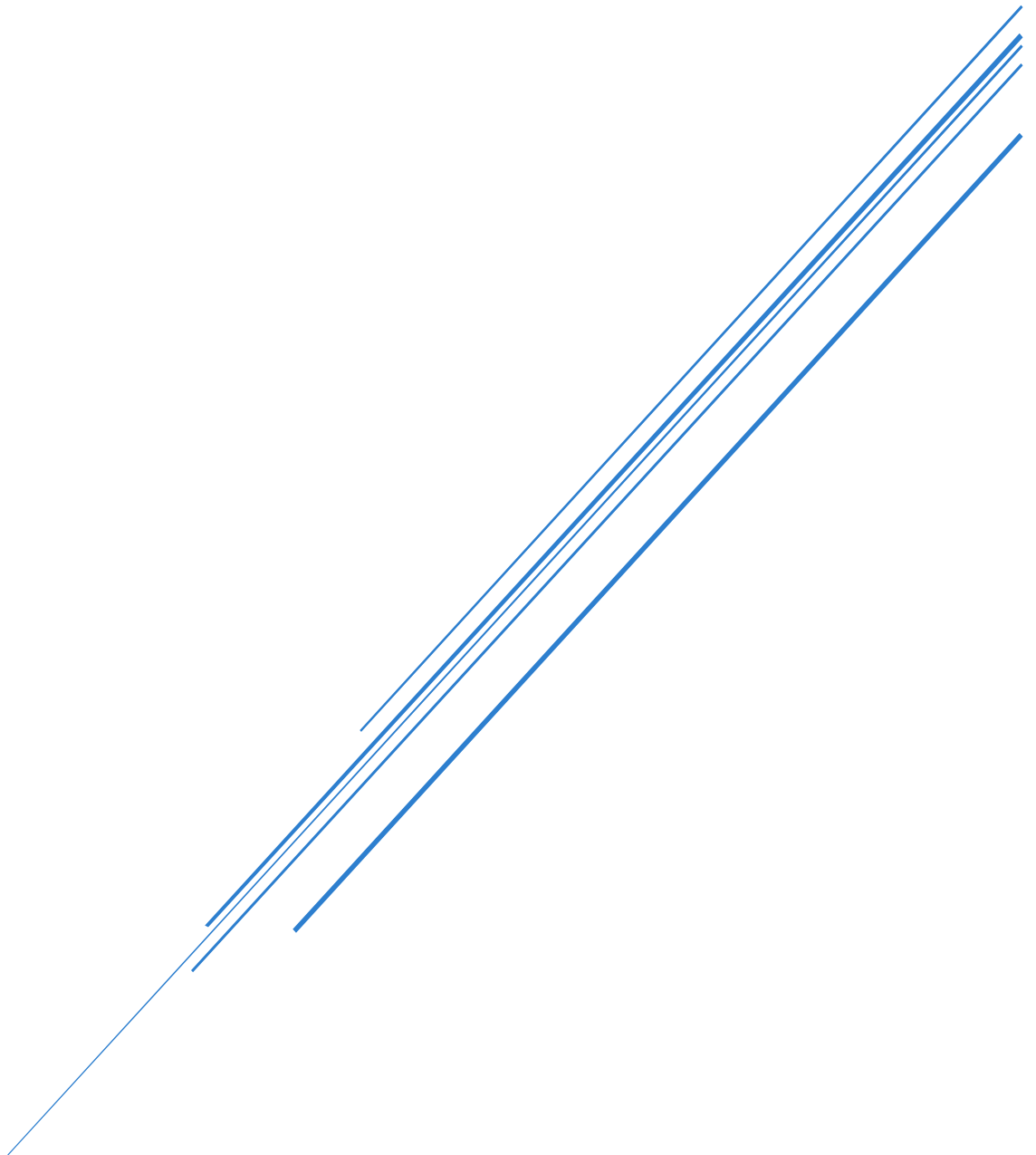


TEST CASES: HEALTHCARE STAFF SECURE

Team: CyberTransformers



ITWeb Security Summit 2025

1. Introduction

This document outlines the functional and non-functional test cases for the **Healthcare Staff Secure (HSS)** system. It is designed to validate that the system meets its specified requirements, including user registration, authentication, profile management, access control, reporting, and compliance tracking. Each test case includes clear steps, expected outcomes, and space for actual results to be recorded during execution. The purpose is to ensure the reliability, security, usability, and overall performance of the HSS platform across supported devices and user roles.

2. Functional Test Cases

Test Case ID	Test Description	Test Steps	Expected Result	Actual Result
TC1	User Registration	1. Go to registration page 2. Fill in valid details 3. Submit the form	Account created and confirmation shown	Account created and confirmation shown
TC2	Login with Email/Phone	1. Go to login page 2. Enter valid email/phone and password 3. Click "Login"	Dashboard loads successfully	Dashboard loads successfully
TC3	Update Profile	1. Login 2. Go to "Profile" 3. Edit fields 4. Click "Save"	Profile updated and confirmation shown	Profile updated and confirmation shown
TC4	View Staff Directory	1. Login 2. Go to "Staff Directory" 3. Use search and filters	Results update in real time	Results update in real time
TC5	Generate Report	1. Login as admin 2. Go to "Reports" 3. Select type and format 4. Click "Generate"	Download starts with correct data	Still struggling with generating reports
TC6	Verify the AI component generates real-time alerts based on threat analysis and compliance status.	1. Simulate a security threat scenario or compliance breach. 2. Monitor the system for AI-generated alert. 3. Verify that alert appears in real-time on affected users' dashboards. 4. Confirm alert content is relevant and actionable.	1. AI generates appropriate alerts promptly. 2. Alerts provide clear information about the issue. 3. Alerts appear only to relevant users. 4. Alert logs are accurate for auditing.	1. AI generates appropriate alerts promptly. 2. Alerts provide clear information about the issue. 3. Alerts appear only to relevant users. 4. Alert logs are accurate for auditing.

		5. Check alert is logged with timestamp and user details. 6. Verify alert disappears once issue is resolved or acknowledged.		
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3. Non-Functional Test Cases

Test Case ID	Test Description	Test Steps	Expected Result	Actual Result
NTC1	Response Time	1. Login 2. Navigate through pages	Each page loads within 2 seconds	Each page loads within 2 seconds
NTC2	Security	1. Call a mentor to try bypass our software.	Strong resistance against penetration.	Strong resistance against penetration.
NTC3	Mobile Responsiveness	1. Open system on mobile browser	UI adjusts correctly to screen size	UI adjusts correctly to screen size
NTC4	Browser Compatibility	1. Open system in Chrome, Firefox, Edge	System works consistently across browsers	System works consistently across browsers

4. Encountered Problems and Their Solutions

Initially, we faced security vulnerabilities when the mentor was able to bypass the system through the login page. After identifying the issue, the developer promptly fixed the loophole, preventing any further unauthorized access attempts. Integrating the AI component proved to be complex and required significant development effort, but through persistence and collaboration, we successfully incorporated it into our system.

5. Conclusion

The test cases presented in this document provide a structured approach to verifying both functional and non-functional requirements of the Healthcare Staff Secure (HSS) system. By executing these tests, we aim to ensure the system performs as intended, supports secure and efficient workflows, and complies with industry standards such as POPIA and HIPAA. Successful completion of these tests will confirm the system's readiness for deployment and its ability to serve healthcare institutions with reliability, security, and usability.