**DA\_Cypress Framework\_L1**

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# Use Case Specification: UC-PatientRegistration01

# Introduction

This document details the specifications for use cases and guidelines for proper conduct during assessments. It is aimed at ensuring a thorough understanding and compliance with the best practices in automation testing, focusing on the integration of the Cypress tool with Selenium (SE), TestNG, and Java.

# Conduct Guidelines

# Important Notice to All Assessors:

Prior to commencing the assessment, please ensure that you have read and understood the following conduct guidelines. Failure to adhere to these guidelines may result in disqualification from the assessment process.

# Resource Restricted Usage:

Access to resources like GMAIL, Google ChatGPT, Quora, Stack Overflow, official emails, search engines, and AI tools will be restricted or monitored.

# Monitoring and Compliance:

Your activities will be monitored. Accessing blocked sites or using unauthorized tools will be recorded and may lead to disqualification.

# Coding Standards:

Write well-commented code to clearly explain your logic and approach. After each test case, document the outcomes and system state comprehensively.

# Use Case Details

# Use Case ID: UC-HealthEMR01 Title: Patient Registration and Operation Theatre (OT) Schedule Management Actors: User, SASA Health EMR System Description: This use case details the testing procedures for patient registration, OT schedule booking, and Admin user login authentication within the SASA Health Electronic Medical Record (EMR) system. It ensures the integrity and functionality of patient registration, schedule management, and access control. Main Success Scenario (Basic Flow):

1. Login Workflow

1. The hospital staff member navigates to the HMS login page.
2. They enter their credentials and are granted access to the system.

2. Patient Registration Workflow

1. Access Registration Page: The hospital staff member navigates to the "Register Patient" page.
2. Enter Patient Details: The staff member enters details like Salutation, First Name, Last Name, Date of Birth, Gender, Phone, Country, Address, Employer Info, Marital Status, Email, and Dialysis Patient status.
3. Validate and Save: The system validates the provided details and saves the new patient record.
4. Generate Unique ID: The system generates a unique Patient ID for the new record.
5. Confirmation: Search with the unique Patient ID generated in the step ‘b’.

3. OT Scheduling Workflow

1. With the patient registered, the staff member navigates to the "OT Scheduling" module.
2. They enter the necessary details for surgery, assign medical personnel, and schedule the OT.
3. The system books the OT and sends pre-surgery instructions to the patient.

# Prerequisites and Preconditions

Automate the use case using Cypress test automation frame work. The SASA Health EMR system is accessible and operational. Test data for patients and OT bookings is to be prepared.  
Preconditions: The Hospital user is registered and logged into the systemas admin use. The patient registration and OT booking modules are accessible to the user.

# Preconditions:

The patient registration system is fully operational.  
Hospital staff have secure access and are authorized to operate the registration module.

Use the URL – http:// [localhost:5000/Account](http://202.51.74.168:302/Account)

Username: admin / Password: pass123 Success Guarantee

# Business Use Case 1: Streamlined Patient Registration and Validation

# Objective:

Automate and validate the patient registration process in the SASA Health system, ensuring accuracy and efficiency. Also the use cases are to be automated and run as a test suite for all cases in one short. Run the TEST Suite and report best of the pass rate from three(3) Test suite runs

# Cypress Implementation:

# Use Cypress Locator Generation, Asynchronous Handling, Interaction Validation

Generate unique selectors for form elements, streamlining the entry of patient details and ensuring accurate interaction with the UI.

Validate form elements like checkboxes (e.g., Dialysis Patient status) and dynamic dropdowns (e.g., patient's county of residence), ensuring all inputs are correctly captured and reflected.

Once the Patient’s Unique get generated, Search in the Patient Search page.

# Business Use Case 2: Efficient OT Scheduling and Confirmation

# Objective:

Facilitate smooth OT scheduling and ensure proper communication of pre-surgery instructions to the patient.

# Workflow Automation, Data Verification and Confirmation and Notification Testing

Leverage Cypress to automate navigation through the "OT Scheduling" module, inputting necessary details and scheduling the OT.

Verify the OT details are correctly entered and that the schedule is accurately recorded in the system by searching the OT schedule for giving data range.

Validate the communication flow, ensuring that pre-surgery instructions are correctly generated and sent to the patient.

Refer the sample test cases for writing Cypress automation scripts for Patient Registration searching patient and OT booking. For you to build the test Cases on sample Test Cases.



# Main Flow

## Login Validation:

1. User enters credentials on the login page.  
2. System validates the credentials.  
3. Upon successful validation, the system redirects the user to the dashboard or designated page.  
4. System displays elements indicating a successful login (e.g., logout button, user name).

## Patient Registration Workflow:

1.User logs into the system.  
2. User navigates to the patient registration page.  
3. User fills in the patient details and submits the form.  
4. Validates and registers the patient.  
5. System displays a confirmation message.

6. Go to patient search page for new patient record.

## OT Schedule Booking:

1. User navigates to the OT schedule booking page.  
2. User selects a patient and fills in the schedule details.  
3. User submits the booking form.  
4. System validates and books the OT schedule.  
5. System displays a confirmation of the successful booking.

## Validation of Mandatory Fields:

1. User attempts to submit the registration or OT scheduling form without filling in all mandatory fields.  
2. System detects the missing information and prevents form submission.  
3. System displays an appropriate error message to the user.

# Alternative Flows

Invalid Login Credentials: System displays an error message and prevents access.  
Duplicate Patient Registration: System prevents registration and alerts the user about the existing record.  
Booking Conflict: System detects a scheduling conflict and informs the user.  
  
Post-Conditions:

1. The patient's data is accurately captured and saved in the SASA Health EMR system.
2. A unique Patient ID is generated for the new record, which can be used for future reference and retrieval of the patient's record.
3. The hospital staff member receives a confirmation message indicating that the registration was successful, which may include the unique Patient ID and other relevant details.
4. The patient's information is verified on the "Search Patient" page to be correct and complete, affirming that the data has been properly stored in the database.
5. The OT schedule is confirmed with the details of the surgery, including date, time, and assigned medical personnel, accurately recorded in the system.
6. Pre-surgery instructions are sent to the patient or made available for the patient to access, ensuring they are informed and prepared for the upcoming procedure.
7. The system's state is updated to reflect the new additions, and any related modules or systems, such as billing, appointment scheduling, or medical records, are synchronized accordingly.
8. All actions taken during this process are logged and can be reviewed or audited if necessary, ensuring accountability and traceability within the EMR system.
9. The patient's information becomes available for scheduling follow-up appointments, tests, or treatments as needed, eliminating the necessity for re-entering their basic details.
10. Post-registration, the hospital staff member can search and verify the OT booking in the "OT Scheduling" module, where the system displays the new OT booking with accurate details.
11. After successful login and completion of tasks, the SASA Health main page provides a summary of information, including the total number of registered patients, total doctors, today's appointments, and department-wise appointment counts for the current day, ensuring the hospital staff member is well-informed of the day's activities and statistics. The patient's data is accurately captured and saved in the SASA Health EMR system.

# Exception Paths

Failure in form submission due to server or validation errors.  
System downtime or unavailability affecting the registration or booking process.

# QA Checklist:

# Ensure the above tests cover the following aspects:

1. All form fields and validation messages are covered by Cypress tests.
2. Tests assert the presence and correctness of Patient IDs.
3. Tests check for successful navigation and data submission feedback.
4. Integration of Cypress with the SASA Health EMR system is validated.
5. Test Runner can generate, use locators, and run the entire suite of tests successfully.
6. Results are properly logged and reviewed.

# Test Data:

Included in the scenario outlines and examples.

# Sample Test Data – Patient Registration [For you to build the test data on sample data]

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Salutation | First Name | Last Name | Date of Birth | Gender | Phone Number | Country | Address | Employer Info | Marital Status | Email | Dialysis Patient |
| Mr. | John | Doe | 1985-01-23 | Male | 555-1234 | USA | 123 Maple Street, Anytown, USA | ABC Corporation | Single | johndoe@example.com | No |
| Ms. | Emily | Smith | 1992-04-16 | Female | 555-5678 | USA | 456 Oak Avenue, Somewhere, USA | XYZ Enterprises | Married | emilysmith@example.com | No |

# Sample Test Data – OT schedule [For you to build the test data on sample data]

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