YAKSHA HEALTH APP WITH JAVASCRIPT AND CYPRESS

**Usecase summary**

**Project Name:** healthapp.yaksha app – Medical Record Management System

**Use Case Summary:** healthapp.yaksha is a healthcare application designed to manage Electronic Medical Records (EMR). it allows users to view, search, and manage patient records. It features functionality such as adding/editing patient records, filtering data by doctor and department, and exporting records. The primary use case is to automate the process of medical record management, ensuring efficient and reliable operations for healthcare providers.

# Technology Stack:

* **Automation Tool:** Cypress(for testing)

# Key Features:

* **Patient Record Management:** Add, edit, and delete patient records.
* **Filtering and Search:** Search medical records by date range, doctor, department, and more.
* **Export Functionality:** Export records for offline access.

# Expected Outcomes:

* Automate key healthcare operations like patient record handling, filtering, and validation.
* Ensure the accurate retrieval and modification of medical records, enhancing operational efficiency.

# Overview of the application Pages/Features:

1. **Login/Registration**: For user authentication.
2. **Dashboard**: Main page displaying patient records.
3. **Patient Records**: Add, edit, delete, and view records.
4. **Appointment Scheduling**: Manage patient appointments.
5. **Search/Filter**: Filter records by various parameters (e.g., doctor, date).

# Project Information:

* + **Use Case**: Aimed at simplifying EMR management, enhancing healthcare record accessibility, and enabling easy interaction with patient data for healthcare providers

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Please use the Application URL https://healthapp.yaksha.com

# Here’s a detailed table format for the test cases to be tested

We have placed a json file on desktop along with this file containing few fields which should be used while implementing.

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| **Test Case No.** | **Test Case Name** | **Precondition** | **Steps** | **Expected Result** |
| 1 | Verify Login with Valid Credentials | User is on the login page https://healthapp. yaksha.com | 1. Navigate to https://healthapp.yaksha.com 2. Enter username as admin. 3. Enter password as pass123. 4. Click the SignIn button. | The user should be successfully logged in and redirected to the dashboard or homepage after login. |

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| **2** | Verify Page Navigation and Load Time for Billing Counter | User logged in | 1. Go to Sidebar Toggler -> Utilities -> Change Billing Counter. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Utilities/C hangeBillingCounter 3. Measure the page load time. 4. Assert that the page load time is within the acceptable threshold e.g 3 seconds. | The billing counter page should load within the acceptable timeframe. Page loaded successfully |
| 3 | Patient Search with Valid Data for appointment page | User logged in. | 1. Go to Sidebar Toggler -> Appointment. 2. Click on the first counter (New-1). 3. Navigate to Sidebar Toggler -> Appointment -> Book Appointment. 4. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Appointm ent/CreateAppointment 5. Enter partial name and search whether the list displays proper list of patients which holds the partial name. 6. Submit search and verify results. | The correct patient search results should be displayed. |
| 4 | Activate Counter in Dispensary | User logged in. | 1. Go to Sidebar Toggler -> Dispensary. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Dispensar y/ActivateCounter 3. Click "Activate Counter" button. (anyone from 3 i.e Morning or Evening or Night counter). 4. Navigate to Sidebar Toggler -> Dispensary -> Counter. 5. You can view the tile with the message “**You have**   **activated the counter and the current activated counter is” and the counter you have selected.** | The counter should be successfully activated, and a confirmation tile should appear. |
| 5 | Purchase Request List Load | User logged in | 1. Go to Sidebar Toggler -> Procurement -> Purchase Request. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Procurem entMain/PurchaseRequest/PurchaseRequestList 3. Select a date one year past the current date and click OK. 4. Verify the purchase request list page loads successfully. | The purchase request list should load with all the relevant data displayed. |
| 6 | Lab Dashboard Data Validation | User logged in. | 1. Go to Sidebar Toggler -> Laboratory. 2. Verify URL: https://healthapp.yaksha.com/Home/Index#/Lab/Dash board 3. Validate “**Test Requests Till Date** text along with **FROM & TO** dates. 4. Compare displayed values with expected data for validation. | The lab dashboard should display accurate and up- to- date data. |
| 7 | Handle Alert on Billing Counter | User logged in. | 1. Go to Sidebar Toggler -> Utilities -> Change Billing Counter. 2. Verify URL: https://healthapp.yaksha.com/Home/Index#/Utilities/C hangeBillingCounter 3. Deactivate the counter. 4. Handle alert using Cypress's dialog handling. 5. Close the alert box 6. Go to Index page.   5. Verify the application works as expected. | The alert should be handled successfully without causing test failure. |

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| 8 | Data-Driven Testing for Patient Search | User logged in. | 1. Go to Sidebar Toggler -> Patient -> Search Patient. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Patient/S earchPatient 3. Read patient data from Json file (e.g., **patientName1**, **patientName2**). 4. Validate search results for all patients. | Patient search should work correctly for all data sets from the json file. |
| 9 | Error Handling and Logging in Purchase Request List | User logged in. | 1. Go to Sidebar Toggler -> Procurement -> Purchase Request. 2. Verify the URL is: [https://healthapp.yaksha.com/Home/Index#/Procurem](https://healthapp.yaksha.com/Home/Index%23/ProcurementMain/PurchaseRequest/PurchaseRequestList) | Error message displayed and logged successfully: "FromDate cannot be more than ToDate." |
| [entMain/PurchaseRequest/PurchaseRequestList](https://healthapp.yaksha.com/Home/Index%23/ProcurementMain/PurchaseRequest/PurchaseRequestList)   1. Enter an invalid date range (FromDate > ToDate). -- Change From Date only |
| 10 | Verify Sorting by Hospital Number in Patient Search | User logged in. | 1. Go to Sidebar Toggler -> Patient -> Search Patient. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Patient/S earchPatient 3. Click on the "Hospital Number" column header. 4. Capture the list of hospital numbers displayed. 5. Validate the numbers are sorted numerically. | Sorting worked correctly; hospital numbers appeared in the correct order. |
| 11 | Verify Locator Strategy for Appointment Search | User logged in and **counter must be activated**. | 1. Go to Sidebar Toggler -> Appointment -> New Visit. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Appointm ent/PatientSearch 3. Use CSS selectors to locate the search bar. 4. Input search criteria into the located element by reading data from external json file (**patientName1**). 5. Perform the search. 6. Assert that displayed patient list matches search criteria. | The correct locators should be used, and the patient list should be accurately displayed. |
| 12 | Validate Element Inspection and Tooltip Visibility in Inventory Stock List | User logged in. | 1. Go to Sidebar Toggler -> Inventory -> Stock. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Inventory   /StockMain/StockList   1. Use Cypress Inspector to locate the search bar and button elements (export and print button) 2. Hover over a button to display its tooltip. 3. Verify that the tooltip text is visible and matches the expected description by reading the data from external Json file (**exportButtonTooltip** and **printButtonTooltip**) | Elements should be correctly identified, and the alert should be handled without issues. |
| 13 | Handle Navigation Exception on Closing Account | User logged in. | 1. Go to Sidebar Toggler -> Accounting -> Transaction. 2. Click on Account Closure tab. 3. Verify the URL is:   [https://healthapp.yaksha.com/Home/Index#/Accountin](https://healthapp.yaksha.com/Home/Index%23/Accounting/Transaction/AccountClosure) | Exceptions should be handled gracefully. |
| [g/Transaction/AccountClosure](https://healthapp.yaksha.com/Home/Index%23/Accounting/Transaction/AccountClosure)   1. Click on “Close Account” button. 2. Then click on “Yes”. 3. Validate error message contains string 'Cannot insert the value NULL'. |

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| 14 | Web Element Handling for Dropdowns in Purchase Request | User logged in. | 1. Go to Sidebar Toggler -> Procurement -> Reports. 2. Click on “Current Stock Level”.   2. Verify the URL is: [https://healthapp.yaksha.com/Home/Index#/Procurem](https://healthapp.yaksha.com/Home/Index%23/ProcurementMain/Reports/Stock/StockLevel) | The correct data should be displayed based on the selected filter from the dropdown menu. |
| [entMain/Reports/Stock/StockLevel](https://healthapp.yaksha.com/Home/Index%23/ProcurementMain/Reports/Stock/StockLevel)   1. Select a specific item (e.g., "Accounts") from the item filter dropdown. 2. Apply the filter. 3. Verify that the displayed stock level report includes only items from the selected store name. |
| 15 | Form and  Error Messages | User is logged in. | 1. Go to Sidebar Toggler -> Procurement -> Purchase Order -> Create Purchase Order. 2. Verify the URL is: https://healthapp.yaksha.com/Home/Index#/Procurem entMain/PurchaseOrder/PurchaseOrderAdd 3. Attempt to submit the Purchase Order form with missing or invalid values in required fields (e.g give in valid currency code). 4. Verify the error messages displayed. 5. Repeat the test for different invalid input scenarios. | Appropriate error messages are displayed for missing or invalid inputs. |
| 16 | Verify Handling of Frames on Patient List Page | User is logged in. | 1. Go to Sidebar Toggler -> Social Service. [https://healthapp.yaksha.com/Home/Index#/SSU/Patie](https://healthapp.yaksha.com/Home/Index%23/SSU/Patie) | The test should successfully locate the frame, interact with elements inside it, Frame switching and interactions worked as expected. |
| [ntList](https://healthapp.yaksha.com/Home/Index%23/SSU/PatientList)   1. Search for any patient name by reading data from external json file (**patientName1**) in “edit information of” field. 2. Select the patient and validate the patient’s name in the newly opened frame. 3. Write in cypress to navigate to pervious to page. |
| 17 | Verify Handling of Tabs for Billing Reports and Other Reports | User logged in. | 1. Go to Sidebar Toggler -> Reports. 2. Verify the URL is : [https://healthapp.yaksha.com/Home/Index#/Report](https://healthapp.yaksha.com/Home/Index%23/Report)[s](https://healthapp.yaksha.com/Home/Index%23/Reports) 3. Click on different tabs like “Admission”, “Billing Reports”, “Appointments” etc. 4. And check if they are switchable (e.g Appointment, Radiology, Lab, Doctors, and Patient reports.) | The test should successfully switch between tabs, interact with elements on each report tab, and verify that the correct data is displayed. |
| **18** | Verify Handling of Popups for Changing BillingCounter | User is logged in. | 1. Go to Sidebar Toggler -> Laboratory -> Settings. 2. Verify the URL is : https://healthapp.yaksha.com/Home/Index#/Lab/Setti ngs/LabTest 3. Perform an action that triggers a popup (e.g., selecting add new lab test). 4. 3. Once the popup opens can click the Add button and verify below error   “Lab Test Code Required.  Please Select Service Department  Please Select Lab Category from List  Please Select atLeast One Specimen” | The popup should be successfully captured and handled. The test should either accept or dismiss the popup as required. |

# Make sure to have the JSON file available in the VM DESKTOP WITHIN the created project folder

**Expectations:Assertions & Validations**: Ensuring app behavior meets expected results.

Learners will gain experience in building strongly-typed applications using Javascript and managing it’s data flow. They'll learn how to define interfaces, use types for error prevention, and improve code maintainability.

app. Key skills include:

* + **Browser Automation**: Interacting with web elements and testing multiple browsers.
  + **End-to-End Testing**: Automating real user interactions and validating overall app functionality.

**Execution Steps:**

1. **Create a folder on desktop with following template: <employeeid><name>. Do not use any special symbol.**
2. **Put all your deliverables inside that folder**
3. **Launch Visual Studio and open terminal (Open ‘…’ on header)**
4. **Initialize the node modules with below command in terminal and press enter**
   1. **npm init**
5. **To Install cypress, do** 
   1. **npm install cypress --save-dev**
6. **To complete setup with mocha framework**
   1. **npx cypress open**
7. **Select “E2E Testing” and click on continue**
8. **Select any browser and hit “Start E2E Testing in “**
9. **Select create “New Spec”**
10. **Hit “Create Spec” and “Okay, run the Spec”**
11. **Create test file for each test case or combine them into one file for easier execution e.g SpecFile.cy.js**
12. **Run all test cases using interactive Cypress Test Runner:**

**npx cypress open**

1. **Run all test cases in headless mode:**

**npx cypress run**