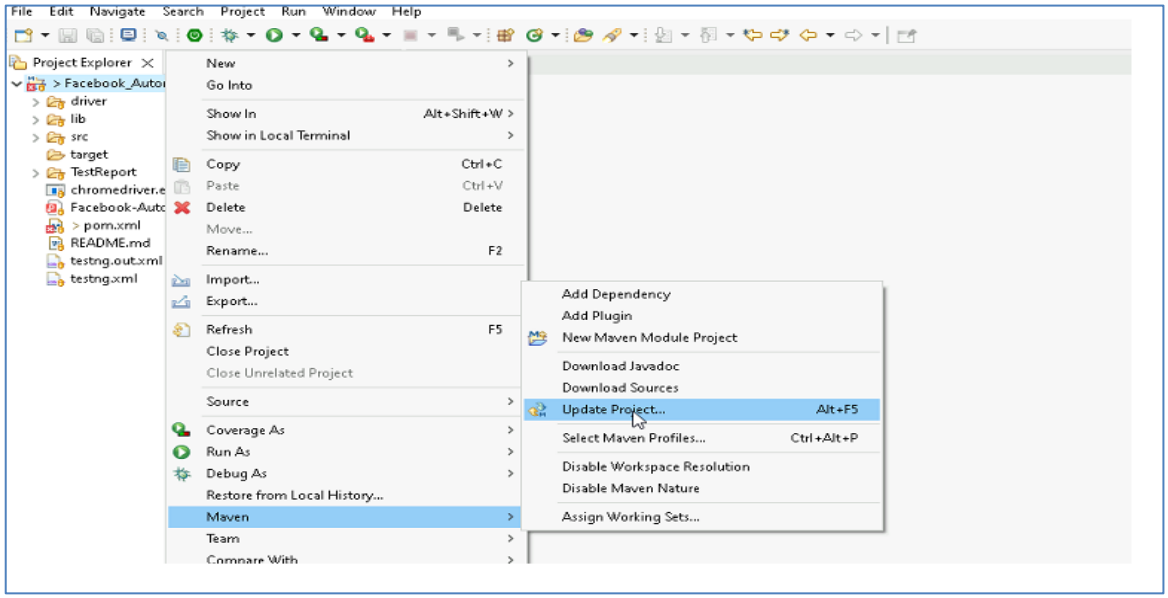
HEALTHAPP AUTOMATION RADIOLOGY MODULE–PL2

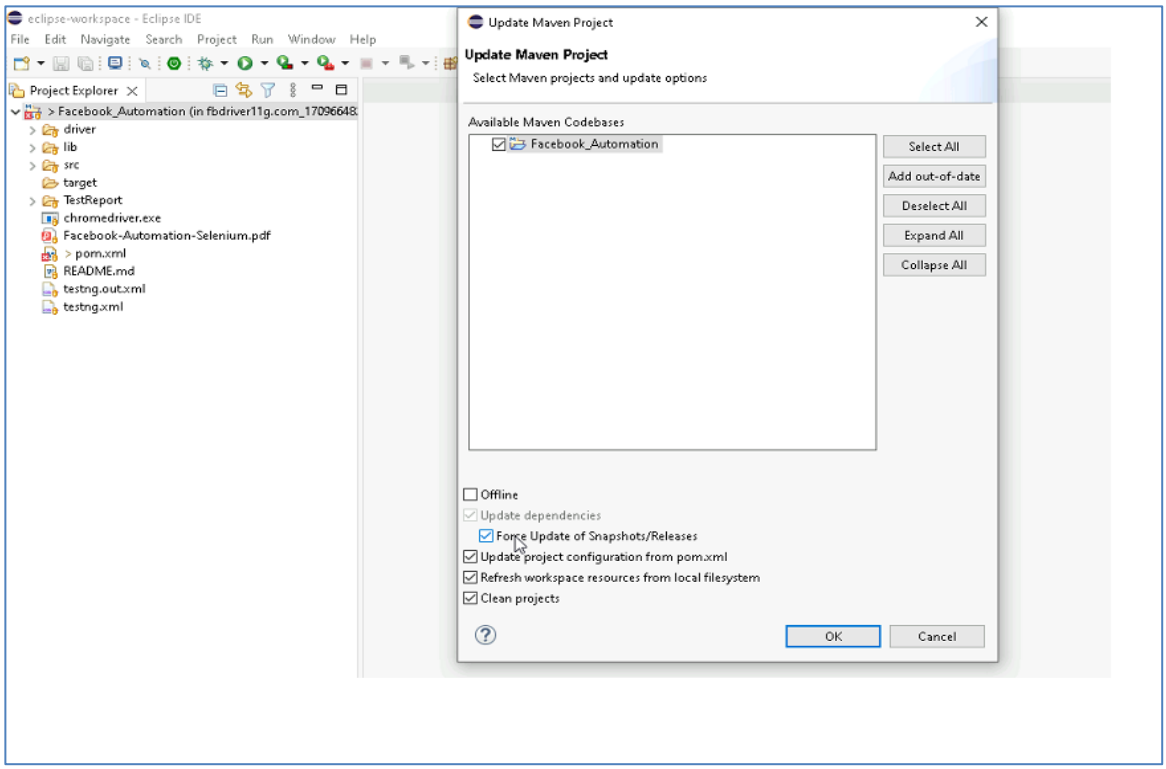
Pre-requisite:

As soon as you import project in eclipse, update the project using maven update option as below. This is to resolve issue if any maven dependency not downloaded properly:

1. Right click on project : Go to “Maven” : Select “Update Project”



2. In Update Maven Project Box Select “Force Update of Snapshots/Releases” and click OK



Template Code Structure:

a. Below are the packages and files you will be required to work upon.

b. Other Files and packages you can ignore.

c. In other Files and packages do not do any changes. It would affect your evaluation.

d. You are not required to work in "Test" Folder. Files there are non-editable. Editing those files and trying to save them will throw error and would affect your evaluation.

Package	Class/File	Description
src/main/java/coreUtilities/utils/	FileOperations.java	1. Contains methods to read from excel file. 2. Method is in templated form. **You will be required to implement these methods as very first activity, because even URL to navigate to, is read using these methods.**
/src/main/java/pages	verification_page.java	1. All core activities (mentioned in list above) to be performed here. 2. The comments associated with each templated method here describe the expectation. 3. You can define locators and xpath here. 4. Declare any variable/object you need to share data/status between different methods. 5. Do not modify the signature of methods declared here. 6. You can create additional supportive common methods in CommonEvents class.
/src/main/resources/	Config.xlsx	URL to navigate to. Already URL is defined here
	expected_data.xlsx	Contains data to fill in form\

/src/main/java/coreUtilities/utils	CommonEvents.java	1. Contains all common activities. 2. Certain templated common method declared here. 3. You implement them as per your need. 4. You can add any additional method for common activity here
	Testng.xml	Execution needs to kick started from TestNG xml

PROBLEM STATEMENT

Need to automate the following activities using Selenium + Java.

Key Activities to implement:

#	Summary	Action	Expected Result
1	Ensure that the Radiology module is available and accessible within the HealthApp.	**Preconditions**: • The user must have successfully logged into the HealthApp application. **Steps**: 1. **Login Verification**: Confirm that the user is logged into the HealthApp. 2. **Locate Radiology Module**: Scroll through the main menu to find the Radiology section. 3. **Access Radiology Module**: Click on the Radiology module.	Radiology module should be present.
2	To ensure that all designated sub-modules are correctly displayed under the Radiology module.	**Preconditions**: The user must be logged into the health system. **Steps**: 1. **Access Radiology Module**: Click on the drop-down arrow or equivalent control next to the Radiology module 2. **Verify Sub-Modules**: Observe the list of sub-modules that appear under the Radiology module. Ensure that all expected sub-modules are displayed. The expected sub-modules include: ○ **List Requests** ○ **List Reports** ○ **Edit Doctors** ○ **Ward Billing**	All sub-modules should be displayed correctly. Expected Sub modules are : List Requests, List Reports, Edit Doctors, Ward Billing
3	To confirm that clicking on the Radiology module navigates to the default sub-module, which should	**Preconditions**: The user must be logged into the healthApp system. **Steps**: 1. **Navigate to Radiology Module**: Click on the Radiology module in the main	Upon clicking the Radiology module, the browser should automatically navigate to the default sub-module 'List Requests'.

	be the 'List Requests' section, Velidate the URL.	navigation of the health system. This action should direct the user to the default view with **"List Request"** module.	
4	To ensure that the 'List Request' section within the Radiology module is equipped with all necessary components for effective operation, including buttons, fields, dropdowns, date pickers, and tooltips.	**Preconditions**: The user must be logged into the healthApp system and located within the Radiology module. **Steps**: 1. **Access Radiology Module**: Click on the drop-down arrow within the Radiology module to expand and reveal its sections. 2. **Navigate to List Request Section**: Select the 'List Request' section to view its contents and available functionalities.	he 'List Request' section should be properly accessible and display the following components: **Buttons**: Ensure the presence of buttons like 'Ok', 'First', 'Previous', 'Next', 'Last', 'Scan Done', 'Add Report', and 'Edit Report'. **Fields**: Verify the inclusion of a search bar for filtering requests. **Dropdowns**: Check for dropdown menus for additional filtering options such as 'Filter' and 'Date range'. **Date Pickers**: Confirm the availability of 'From' and 'To' date pickers. **Tooltip**: A tooltip should be present on the 'Star' figure.
5	To ensure seamless navigation between different sub-modules within the Radiology module.	**Preconditions**: The user is logged into the healthApp system and is within the Radiology module. **Steps**: 1. **Navigate to List Reports**: Click on the 'List Reports' option to ensure it is active. 2. **Switch to Edit Doctors**: From 'List Requests', click on the 'Edit Doctors' link to navigate to the section. 3. **Navigate to Ward Billing**: After verifying the 'Edit Doctors' section, click on the 'Ward Billing' option to access it. 4. **Return to List Requests**: Finally, navigate back to the 'List Requests' to confirm the ability to switch back to the initial section.	Clicking on each sub-module link or button should lead to the respective section without any delays or errors.
6	Ensure that the 'Next' button is visible after users scroll to the bottom of the Radiology module, facilitating navigation to subsequent records or pages.	**Preconditions**: The user is logged into the healthApp system. The user is on "List Request" submodule of the Radiology module. **Steps**: 1. **Set Filter to Show All Records**: Select the "All" option from the "Filter" dropdown to display all records, ensuring there are enough entries to necessitate scrolling. 2. **Scroll to Bottom of Page**: Perform a vertical scroll to reach the bottom of the Radiology module page.	The "Next" button should be visible after scrolling vertically.
7	Ensure that the tooltip for the 'Star' icon in the List Requests section of the Radiology module accurately displays helpful	**Preconditions**: The user is on "List Request" submodule of the Radiology module. **Steps**: 1. **Locate and Hover Over 'Star' Icon**: Move the mouse cursor over the 'Star' icon within the List Requests interface.	Tooltip should be present when hover the mouse on star with text "Remember this date"

	text when hovered over by the mouse.	2. **Observe Tooltip**: Carefully watch for a tooltip to appear when the mouse hovers over the 'Star' icon.	
8	Ensure that after setting date filters and interacting with the 'Star' tooltip in the List Requests section of the Radiology module, these settings remain unchanged even after refreshing and navigating back to the page.	**Preconditions**: The user must be logged into the health system. The user is within the Radiology module, specifically in the List Requests section. **Steps**: 1. **Set Date Filters**: Navigate to the Radiology module and access the "List Requests" section. Set the "FROM" date to "Jan 2020" and the "TO" date to "March 2024". 2. **Interact with Star Tooltip**: Click on the 'Star' tooltip to observe any functionalities or messages it might display. 3. **Confirm Settings**: Click the "OK" button to confirm the date settings. 4. **Refresh and Re-Navigate**: Refresh the page and navigate back to the "List Requests" section. 5. **Verify Tooltip and Dates**: After navigating back, check the 'Star' tooltip for any changes and verify if the "FROM" and "TO" dates remain set to "Jan 2020" and "March 2024", respectively.	The date settings in the "FROM" and "TO" fields should be unchanged, maintaining the user's previous selections despite the page refresh.
9	To ensure that selecting the "one week" date range from the dropdown in the List Requests section effectively filters the displayed data to only include requests from the past week.	**Preconditions**: The user must be logged into the health system. The user is located in the List Requests section of the Radiology module. **Steps**: 1. **Access Date Range Dropdown**: Click on the date range button to open the dropdown menu for date filtering options. 2. **Select 'One Week' Option**: From the dropdown, select the "one week" option to set the filter to display data from the past week. 3. **Apply Date Filter**: Click the "OK" button to confirm and apply the selected date range.	After applying the "one week" date filter, the data displayed in the List Requests section should only include requests that have a 'Requested on' date falling within the last week from the current date.
10	Ensure that selecting 'X-RAY' from the Filter dropdown in the List Requests section accurately filters the records based on the specified modality, displaying only X-RAY related requests within a defined date range.	**Preconditions**: The user must be logged into the health system. The user is located in the List Requests section. **Steps**: 1. **Access Filter Dropdown**: Click on the Filter dropdown to reveal the list of modalities. 2. **Select 'X-RAY' Option**: Choose 'X-RAY' from the dropdown to set the filter for displaying only X-RAY related requests. 3. **Set Date Range**: Click on the "FROM" date picker and select "Jan 2020", then click on the "TO" date picker and select "March 2024" to define the date range for the filter. 4. **Apply Filters**: Click the "OK" button to apply the selected filters.	After applying the filters, the displayed records in the List Requests section should only include requests that are related to X-RAY procedures and fall within the specified date range from January 2020 to March 2024.

11	Ensure that attempting to cancel a billing record in the Radiology Ward Billing section triggers a prompt for cancellation remarks, Validate the message.	**Preconditions**: The user must be logged into the healthApp system. The user is navigated to the Radiology module's "List Request" submodule. **Steps**: 1. **Access Ward Billing**: Select the 'Ward Billing' option to view billing records associated with radiology services. 2. **Search for a Specific Patient**: Use the search functionality to locate "Devid8" 3. **View Patient Details**: Click the 'View Details' button next to the filtered record to open the billing details modal. 4. **Attempt to Cancel**: In the Radiology Ward Billing modal, click the 'Cancel' button.	Upon clicking 'Cancel', a popup message should appear prompting the user to enter cancellation remarks. The message should specifically state: "Please Write Cancellation Remarks."
12	To ensure that entering a specific keyword into the search field in the List Requests section retrieves records that match the keyword accurately.	**Preconditions**: The user must be logged into the health system. The user is located in the List Requests section, ready to perform a search. **Action**: 1. **Enter Search Keyword**: Type "USG Chest" into the search field provided within the List Requests section.	Records that contain the keyword "USG Chest" should be displayed as a result of the search.
13	Ensure that an imaging order for 'USG Chest' can be successfully created within the Doctor module, specifically under the 'In Patient Department' section, and verify that the order is properly recorded and visible in the patient's records.	**Preconditions**: The user must be logged into the healthApp system. **Steps**: 1. **Navigate to Doctor Module**: Access the Doctor module from the main dashboard or menu. 2. **Access In Patient Department**: Click on the "In Patient Department" section to view patient listings and related actions. 3. **Initiate Lab Request**: Click the "Lab" button associated with a specific patient record to start ordering procedures. 4. **Open Imaging Dropdown**: Click on the designated dropdown (labeled "----------" in the steps) to select the type of test. 5. **Select Imaging Option**: Choose "Imaging" from the dropdown menu to specify the category of the lab order. 6. **Search and Select Order Item**: Click on the "search order item" field and select "USG Chest" from the available options. 7. **Proceed with Order**: Click the "Proceed" button to finalize the order details. 8. **Sign the Order**: Click the "sign" button on the "Imaging Order" page to authenticate and submit the order.	After submission, the imaging order for 'USG Chest' should be correctly created and recorded in the "List request" section of the "Radiology" module.
14	To confirm that the 'Selected Order' section is effectively removed from the interface when the 'Cancel' button is clicked during the order creation process in the 'In Patient Department' section of the Doctor module.	**Preconditions**: The user must be logged into the health system. The user is located in the 'In Patient Department' of the Doctor module. **Steps**: 1. **Navigate to Doctor Module**: Go to the Doctor module from the main interface. 2. **Access In Patient Department**: Click on the "In Patient Department" section. 3. **Initiate Lab Request**: Press the "Lab" button for a specific patient record to	The "Selected order" section containing "Lab", "Medication", "Imaging", and "Others" fields should disappear , and ensure the "Active order" list is visible.

		begin the order process. 4. **Select Order Type**: Click on the "----------" dropdown and choose the "Imaging" option. 5. **Enter Order Details**: Click on the "search order item" field, and select "USG Chest" from the list of available imaging tests. 6. **Cancel the Order**: Click on the "Cancel" button.	
15	To ensure that a screenshot of the current page within the Radiology section can be successfully captured and saved to the designated screenshot folder.	**Preconditions**: The user must be logged into the healthApp system. The user is located in the Radiology section of the application. **Steps**: 1. **Capture Screenshot**: Use the system's functionality or a tool designated for screenshots to capture the current state of the Radiology section.	A screenshot of the Radiology section should be successfully taken, capturing all visible elements and layout accurately.

NOTE: "Please do not delete any file in the src folder. But you are free to add any other file".

Expectations:

1) Learners should write automation script using Java and selenium to automate all the steps in the above question. In other words, automation script should perform all mentioned steps.
2) Learners should not use any tools to create the xpath. They should develop the xpath/cssselector on their own.

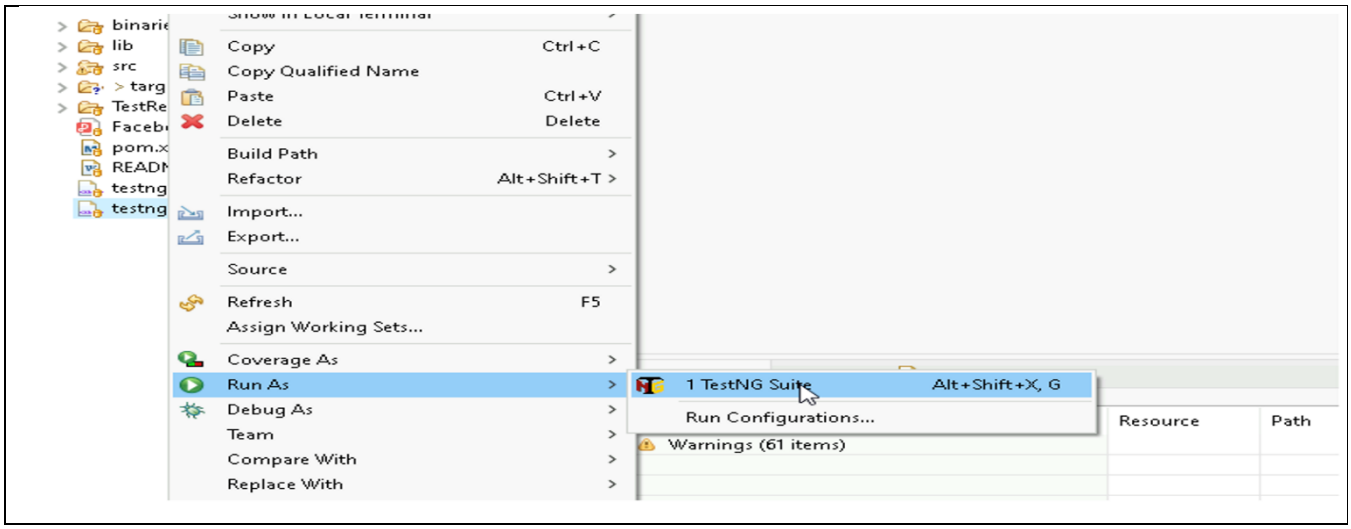
IMPLEMENTATION/FUNCTIONAL REQUIREMENT

1.1 CODE QUALITY/OPTIMIZATIONS

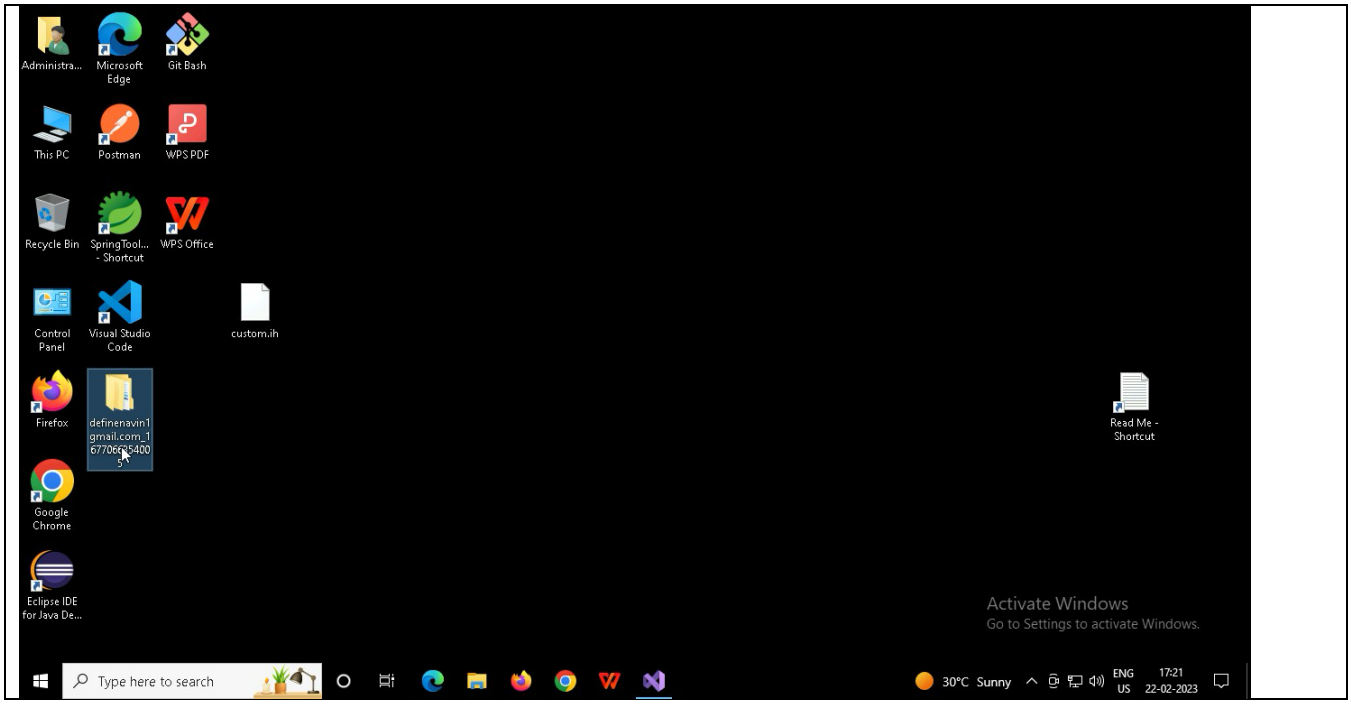
1. Associates should have written clean code that is readable.
2. Associates need to follow SOLID programming principles.

EXECUTION STEPS TO FOLLOW

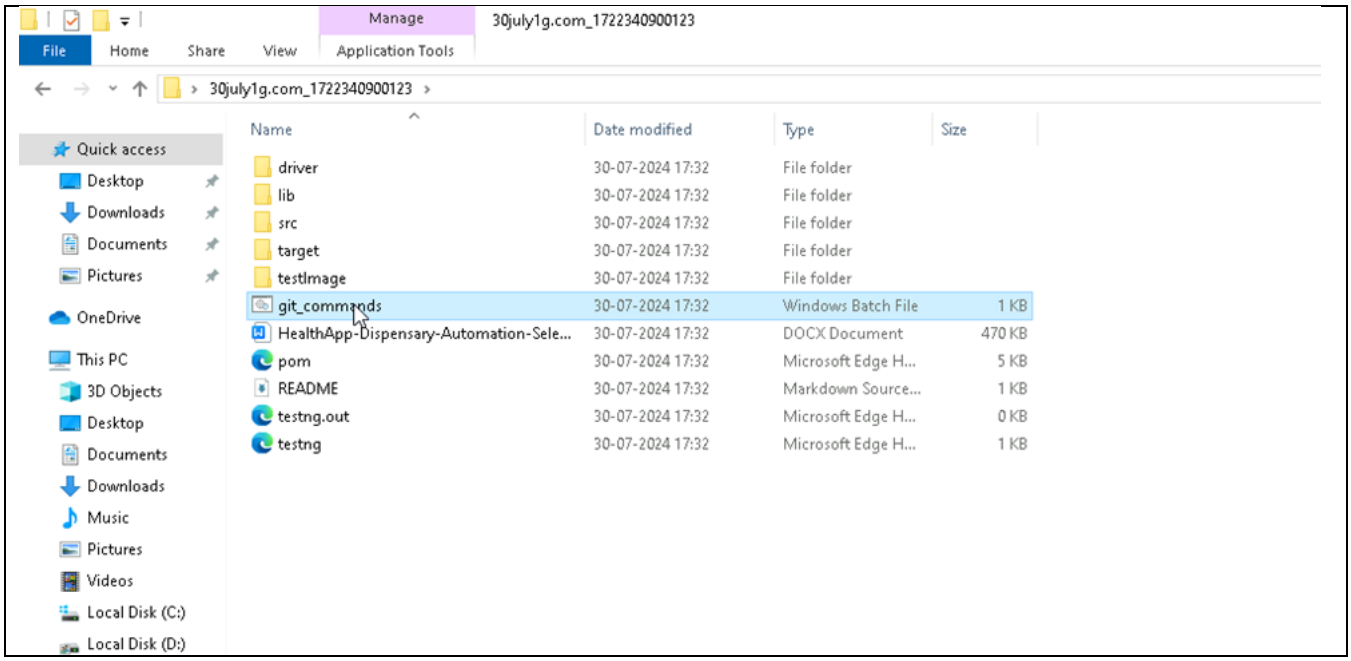
1. **You are mandatory required to run test cases for applications before final submission. Without which project evaluation will not happen.**
2. **You can launch test cases any time as follows: Right click on testng.xml and run TestNGSuite.**



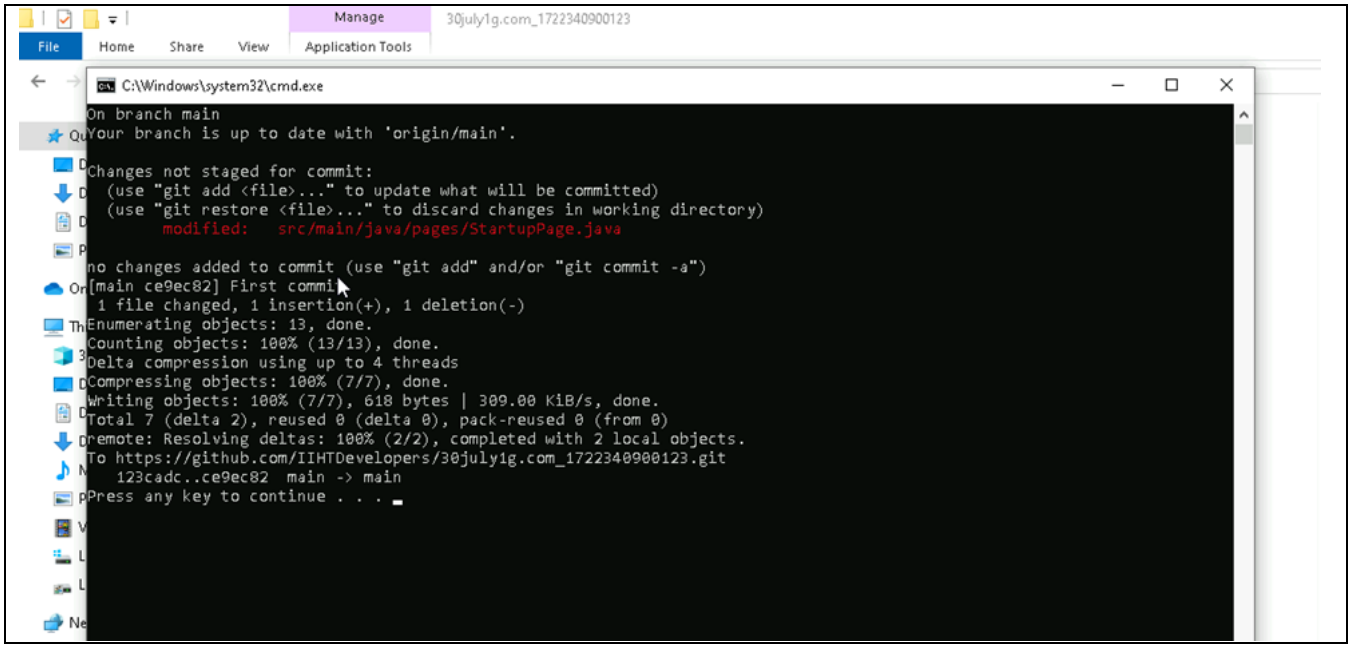
3. **Before final submission, you are also required to push your code to GIT. Following are the steps to follow:**



In your project folder, you will find a batch file named git_commands

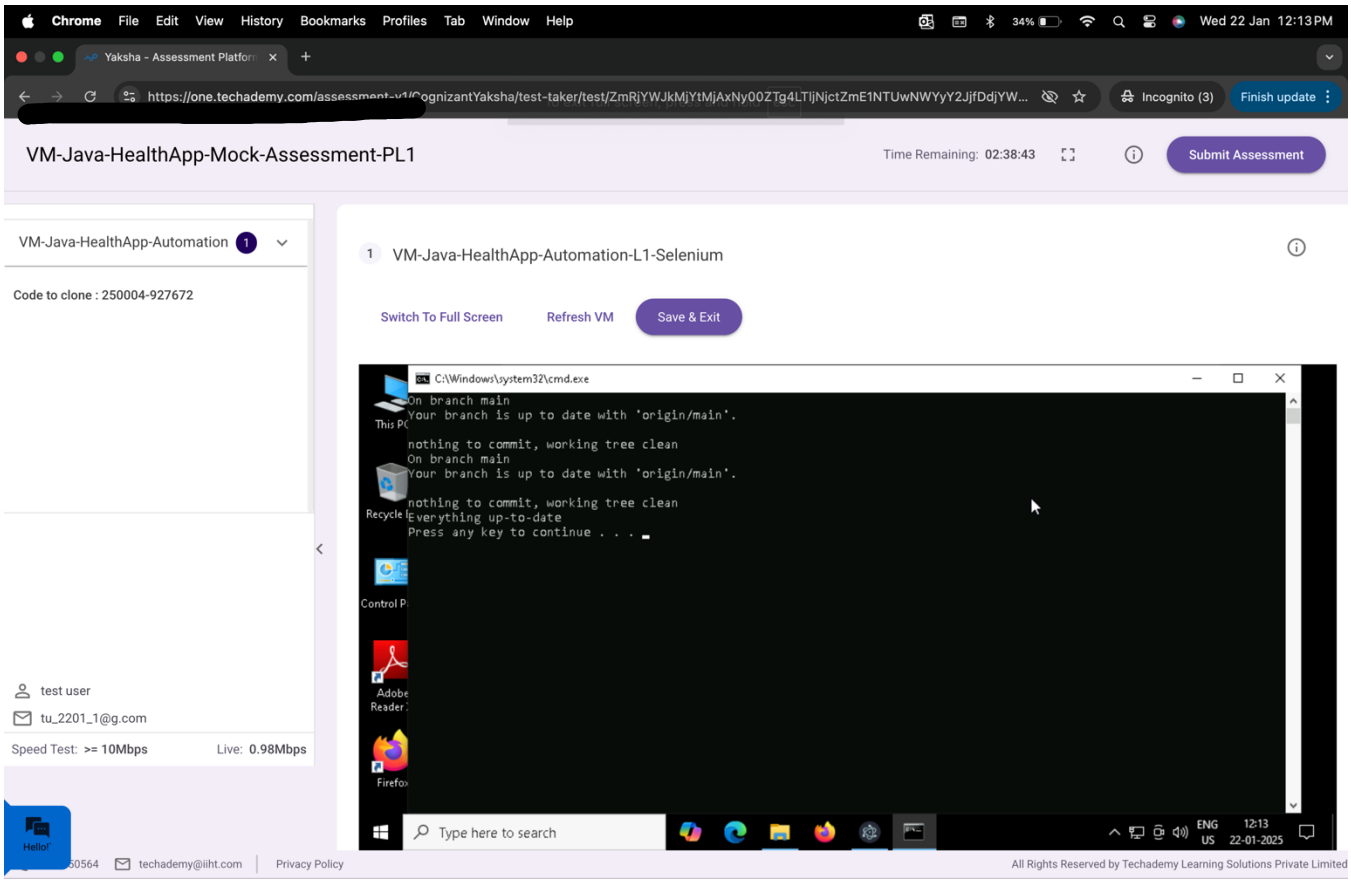


Double-click the batch file to run it. It will run the commands to push your code to GIT.



Once the code is pushed to git, you can go for the final submission of the assessment.

- Press escape to come out of Fullscreen mode.
- Submit the assessment.



After the successful submission of the assessment, you will get a confirmation message displayed on your screen.

==========

All the Best