

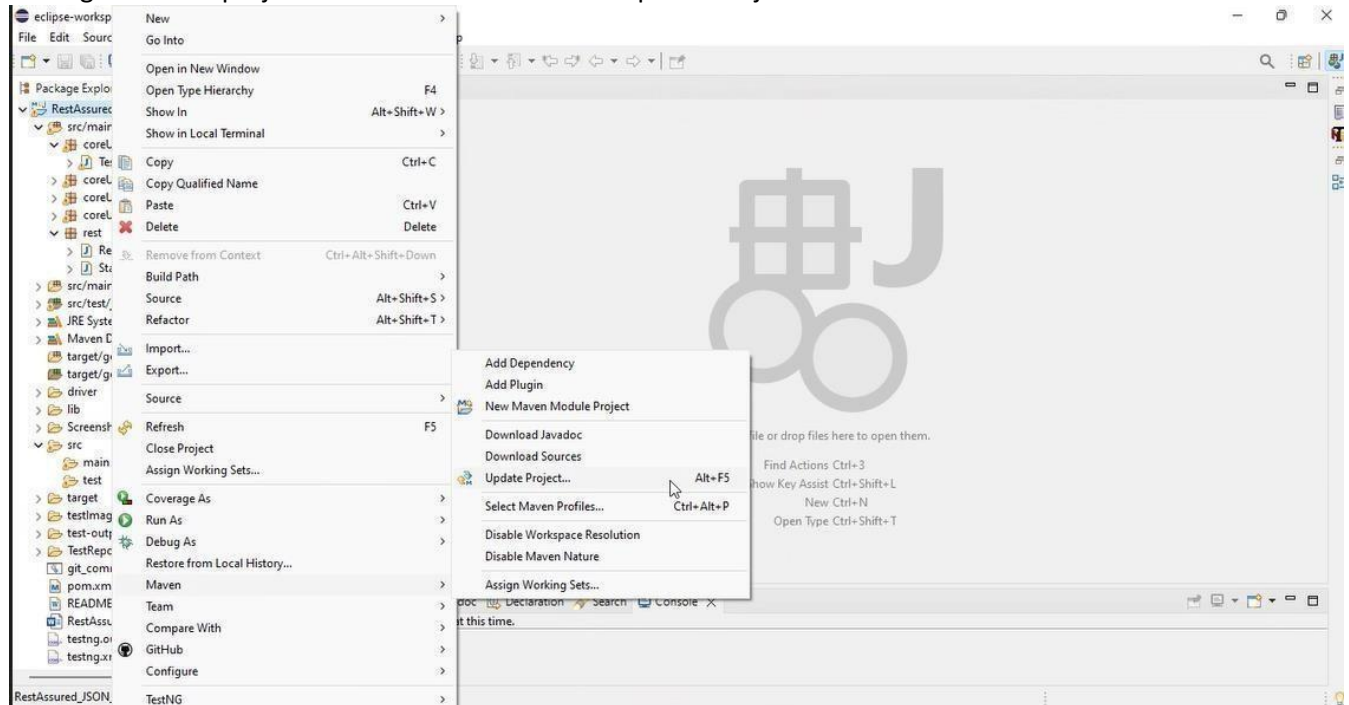
# RESTASSURED API AUTOMATION PROJECT



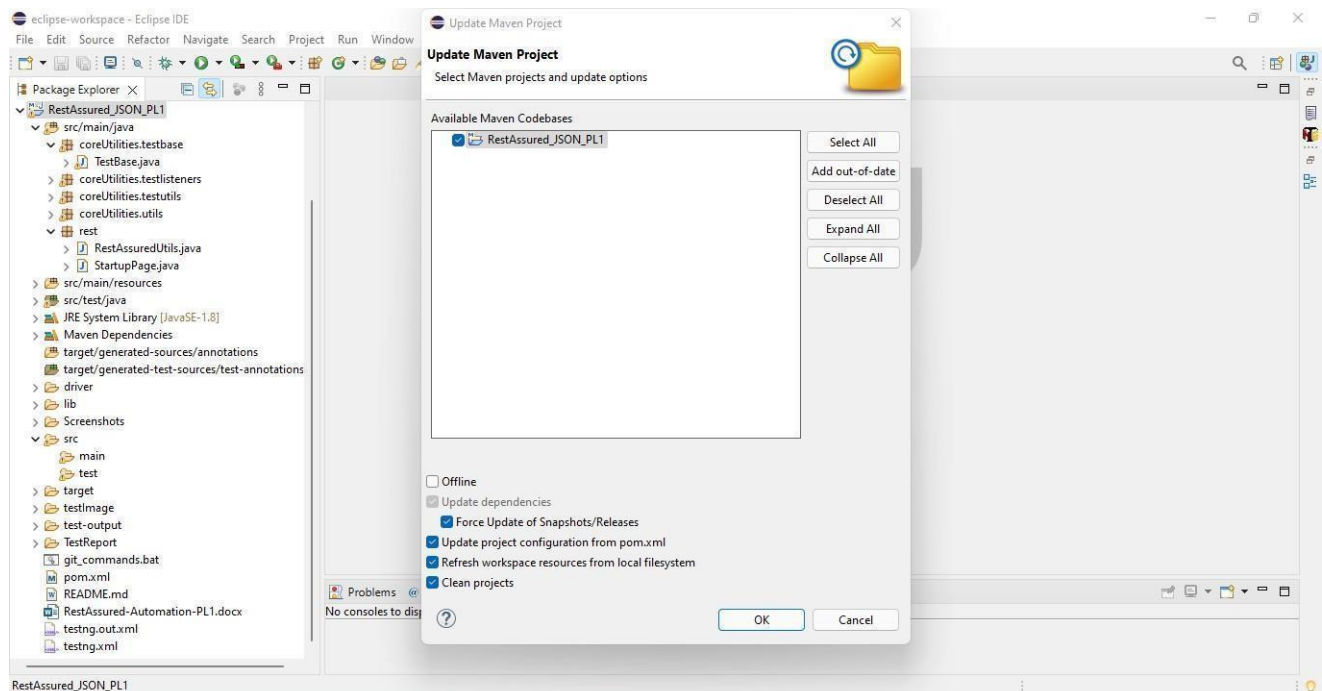
## Pre-requisite:

As soon as you import a project in eclipse, update the project using the 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/utis/	FileOperations.java	<ol style="list-style-type: none"><li>1. Contains methods to read from excel file.</li><li>2. Method is in templated form.</li><li>3. <b>You will be required to implement these methods as very first activity, because for creating post the data should be read from excel.</b></li></ol>
/src/main/java/rest	ApiUtil.java	<ol style="list-style-type: none"><li>1. All core activities to be performed here.</li><li>2. The comments associated with each templated method here describe the expectation.</li><li>3. Declare any variable/object you need to share data/status between different methods.</li><li>4. Do not modify the signature of methods declared here.</li><li>5. You can create additional supportive common methods in CommonEvents class.</li></ol>
/src/main/java/rest	AuthUtil.java	<ol style="list-style-type: none"><li>1. Class already defined to read and return bearer token from</li></ol>

		config.properties file.
/src/main/java/rest	CustomResponse	We have already created custom response object class. You need to use this and use it as return type from ApiUtil.java class methods.
/src/main/resources/	Config.xlsx	Data present to be used in Implementing functions.
/src/main/java/coreUtilities/utls	CommonEvents.java	<ol style="list-style-type: none"> <li>1. Contains all common activities.</li> <li>2. Certain templated common methods declared here.</li> <li>3. You implement them as per your need.</li> <li>4. You can add any additional method for common activity here</li> </ol>
	Testng.xml	Execution needs to kick started from TestNG xml

## PROBLEM STATEMENT

Need to automate the following activities using RestAssured.

## Key Activities to implement:

Below activities need to be implemented in the ApiUtil.java file present in src/main/java/rest package.

SI No.	Summary	Action	Expected Result
1	Retrieve all departments in Method:  getAllDepartments(String endpoint, Object body)	<ol style="list-style-type: none"><li>1.Create an URL by combining the BASE_URL (already declared) and path parameter (provided as an argument in method). The final URL becomes: <b>https://healthapp.yaksha.com/api/AssetReports/GetAllDepartments</b></li><li>2. Include a bearer token for authentication in authorization header.</li><li>3.Trigger a GET call to the specified endpoint.</li><li>4.Create an object of type CustomResponse and initialize it with values extracted from the Response object:<ul style="list-style-type: none"><li>● Response</li><li>● statusCode (extracted from Response object)</li><li>● DepartmentId list (extracted from Response object)</li><li>● DepartmentName list (extracted from Response object)</li><li>● Status (extracted from Response object)</li></ul></li><li>5. Return the CustomResponse object from the method.</li></ol>	<ul style="list-style-type: none"><li>- Returns an object of type CustomResponse containing statusCode, status, DepartmentId list, DepartmentName list, and the complete Response object.</li><li>- StatusCode should be 200.</li><li>- Status should be OK.</li><li>- DepartmentId and DepartmentName lists should not be empty and should not be null.</li></ul>

2	<p>Retrieve all the list of items in Method:</p> <p><code>getAllItems(String endpoint, Object body)</code></p>	<ol style="list-style-type: none"> <li>1. Create an URL by combining the BASE_URL (already declared) and path parameter (provided as an argument in method). The final URL becomes: <b><code>https://healthapp.yaksha.com/api/AssetReports/GetAllItems</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3. Trigger a GET call to the specified endpoint.</li> <li>4. Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>• Response</li> <li>• statusCode (extracted from Response object)</li> <li>• ItemId list (extracted from Response object)</li> <li>• ItemName list (extracted from Response object)</li> <li>• Status (extracted from Response object)</li> </ul> </li> <li>5. Return the CustomResponse object from the method.</li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, ItemId list, ItemName list, and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- ItemId list and ItemName list should not be empty.</li> </ul>
3	<p>Retrieve incentive summary report in Method:</p> <p><code>getIncentiveSummaryReport(String URL, Object body)</code></p>	<ol style="list-style-type: none"> <li>1. The final URL is provided as a parameter (URL) and that is: <b><code>https://healthapp.yaksha.com/BillingReports/INCTV_DocterSummary?FromDate=" + fromDate + "&amp;ToDate=" + toDate + "&amp;IsRefferalOnly=" + isRefferal</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3. Trigger a GET call to the specified endpoint.</li> <li>4. Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>• Response</li> <li>• statusCode (extracted from Response object)</li> <li>• PrescriberId list (extracted from Response object as a list)</li> <li>• PrescriberName list (extracted from Response object as a list)</li> <li>• DocTotalAmount list (extracted from Response object as a list)</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, PrescriberId list, PrescriberName list, DocTotalAmount list, TDSAmount list, NetPayableAmount list and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- PrescriberId list, PrescriberName list, DocTotalAmount list, TDSAmount list and NetPayableAmount list should not be empty and should not be null.</li> </ul>

		<ul style="list-style-type: none"> <li>• TDSAmount list (extracted from Response object as a list)</li> <li>• NetPayableAmount list (extracted from Response object as a list)</li> <li>• Status (extracted from Response object)</li> </ul> <p>5. Return the CustomResponse object from the method.</p>	
4	<p>Retrieve incentive referral summary report in Method:</p> <p><code>getIncReffSummReport(String URL, Object body)</code></p>	<p>1.The final URL is provided as a parameter (URL) and that is:  <b><code>https://healthapp.yaksha.com/BillingReports/INCTV_DocterSummary?FromDate=" + IncFromDate + "&amp;ToDate=" + IncToDate + "&amp;IsRefferalOnly=" + isRefferal</code></b></p> <p>2. Include a bearer token for authentication in authorization header.</p> <p>3.Trigger a GET call to the specified endpoint.</p> <p>4.Create an object of type CustomResponse and initialize it with values extracted from the Response object:</p> <ul style="list-style-type: none"> <li>• Response</li> <li>• statusCode (extracted from Response object)</li> <li>• PrescriberName list (extracted from Response object as a list)</li> <li>• PrescriberId list (extracted from Response object as a list)</li> <li>• DocTotalAmount list (extracted from Response object as a list)</li> <li>• TDSAmount list (extracted from Response object as a list)</li> <li>• NetPayableAmount list (extracted from Response object as a list)</li> <li>• Status (extracted from Response object)</li> </ul> <p>5. Return the CustomResponse object from the method.</p>	<p>- Returns an object of type CustomResponse containing statusCode, status, PrescriberId list, PrescriberName list, DocTotalAmount list, TDSAmount list, NetPayableAmount list and the complete Response object.</p> <p>- StatusCode should be 200.</p> <p>- Status should be OK.</p> <p>- PrescriberId list, PrescriberName list, DocTotalAmount list, TDSAmount list and NetPayableAmount list should not be empty and should not be null.</p>

5	<p>Retrieve hospital income incentive report in Method:</p> <p><code>getHospIncIncReport(String endpoint, Object body)</code></p>	<ol style="list-style-type: none"> <li>1.The final URL is provided as a parameter (endpoint) and that is: <b><code>https://healthapp.yaksha.com/Reporting/HospitalIncomeIncentiveReport?FromDate="+IncFromDate + "&amp;ToDate=" + IncToDate + "&amp;ServiceDepartments=" + ServiceDepartments</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3.Trigger a GET call to the specified endpoint.</li> <li>4.Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>● Response</li> <li>● statusCode (extracted from Response object)</li> <li>● ServiceDepartmentId list (extracted from Response object as a list)</li> <li>● ServiceDepartmentName list (extracted from Response object as a list)</li> <li>● NetSales list (extracted from Response object as a list)</li> <li>● ReferralCommission list (extracted from Response object as a list)</li> <li>● GrossIncome list (extracted from Response object as a list)</li> <li>● OtherIncentive list (extracted from Response object as a list)</li> <li>● HospitalNetIncome list (extracted from Response object as a list)</li> <li>● Status (extracted from Response object)</li> </ul> </li> <li>5. Return the CustomResponse object from the method.</li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, ServiceDepartmentId list, ServiceDepartmentName list, HospitalNetIncome list, NetSales list, OtherIncentive list, ReferralCommission list and GrossIncome list and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- ServiceDepartmentId list, ServiceDepartmentName list, HospitalNetIncome list, NetSales list, OtherIncentive list, ReferralCommission list and GrossIncome list should not be empty and should not be null.</li> </ul>
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6	<p>Retrieve employee bill items in Method:</p> <p><code>getEmpBillItem(String endpoint, Object body)</code></p>	<ol style="list-style-type: none"> <li>1. Create an URL by combining the BASE_URL (already declared) and path parameter (provided as an argument in method). The final URL becomes: <b><code>https://healthapp.yaksha.com/api/Incentive/EmployeeBillItems?employeeId=" + employeeId</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3. Trigger a GET call to the specified endpoint.</li> <li>4. Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>• Response</li> <li>• statusCode (extracted from Response object)</li> <li>• EmployeeIncentiveInfold object (extracted from Response object)</li> <li>• EmployeeId object (extracted from Response object)</li> <li>• FullName object (extracted from Response object)</li> <li>• TDSPercent object (extracted from Response object)</li> <li>• EmpTDSPercent object (extracted from Response object)</li> <li>• IsActive object (extracted from Response object)</li> <li>• <u>EmployeeBillItemsMap</u> list (extracted from Response object as a list)</li> <li>• Status (extracted from Response object)</li> </ul> </li> <li>5. Return the CustomResponse object from the method.</li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, EmployeeIncentiveInfold object, EmployeeId object, IsActive object, FullName object, TDSPercent object, EmpTDSPercent object, <u>EmployeeBillItemsMap</u> list, and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- EmployeeIncentiveInfold object, EmployeeId object, IsActive object, FullName object, TDSPercent object, EmpTDSPercent object, <u>EmployeeBillItemsMap</u> list should not be null and should not be empty.</li> </ul>
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7	<p>Retrieve inventory fiscal years in Method:</p> <p><code>getInvntryFiscalYrs(String endpoint, Object body)</code></p>	<ol style="list-style-type: none"> <li>1. Create an URL by combining the BASE_URL (already declared) and path parameter (provided as an argument in method). The final URL becomes: <b><code>https://healthapp.yaksha.com/api/Inventory/InventoryFiscalYears</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3. Trigger a GET call to the specified endpoint.</li> <li>4. Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>● Response</li> <li>● statusCode (extracted from Response object)</li> <li>● FiscalYearId list (extracted from Response object as a list)</li> <li>● FiscalYearName list (extracted from Response object as a list)</li> <li>● StartDate list (extracted from Response object as a list)</li> <li>● EndDate list (extracted from Response object as a list)</li> <li>● IsActive list (extracted from Response object as a list)</li> <li>● Status (extracted from Response object)</li> </ul> </li> <li>5. Return the CustomResponse object from the method.</li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, FiscalYearId list, FiscalYearName list, StartDate list, EndDate list, IsActive list and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- FiscalYearId list, FiscalYearName list, StartDate list, EndDate list, IsActive list should not be null.</li> </ul>
8	<p>Activate inventory in Method:</p> <p><code>getActInventory(String endpoint, Object body)</code></p>	<ol style="list-style-type: none"> <li>1. Create an URL by combining the BASE_URL (already declared) and path parameter (provided as an argument in method). The final URL becomes: <b><code>https://healthapp.yaksha.com/api/ActivateInventory/</code></b></li> <li>2. Include a bearer token for authentication in authorization header.</li> <li>3. Trigger a GET call to the specified endpoint.</li> <li>4. Create an object of type CustomResponse and initialize it with values extracted from the Response object: <ul style="list-style-type: none"> <li>● Response</li> <li>● statusCode (extracted from</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>- Returns an object of type CustomResponse containing statusCode, status, StoreId list, Name list, StoreDescription list and the complete Response object.</li> <li>- StatusCode should be 200.</li> <li>- Status should be OK.</li> <li>- StoreId list, Name list and StoreDescription list should not be empty and should not be null.</li> </ul>

		Response object) <ul style="list-style-type: none"> <li>• StoreId list (extracted from Response object as a list)</li> <li>• Name list (extracted from Response object as a list)</li> <li>• StoreDescription list (extracted from Response object as a list)</li> <li>• Status (extracted from Response object)</li> </ul> 5. Return the CustomResponse object from the method.	
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**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 scripts using Java and REST Assured to automate the API testing for all the provided methods (e.g., GET, POST, PUT, DELETE).** In other words, the automation script should perform all mentioned API interactions, including validation of responses.
  - 2) **Learners should not use any pre-built libraries or tools to validate API responses (e.g., JSON schema validation tools).** They should manually validate the response content (e.g., status codes, response body, etc.) by writing their own logic for assertion.
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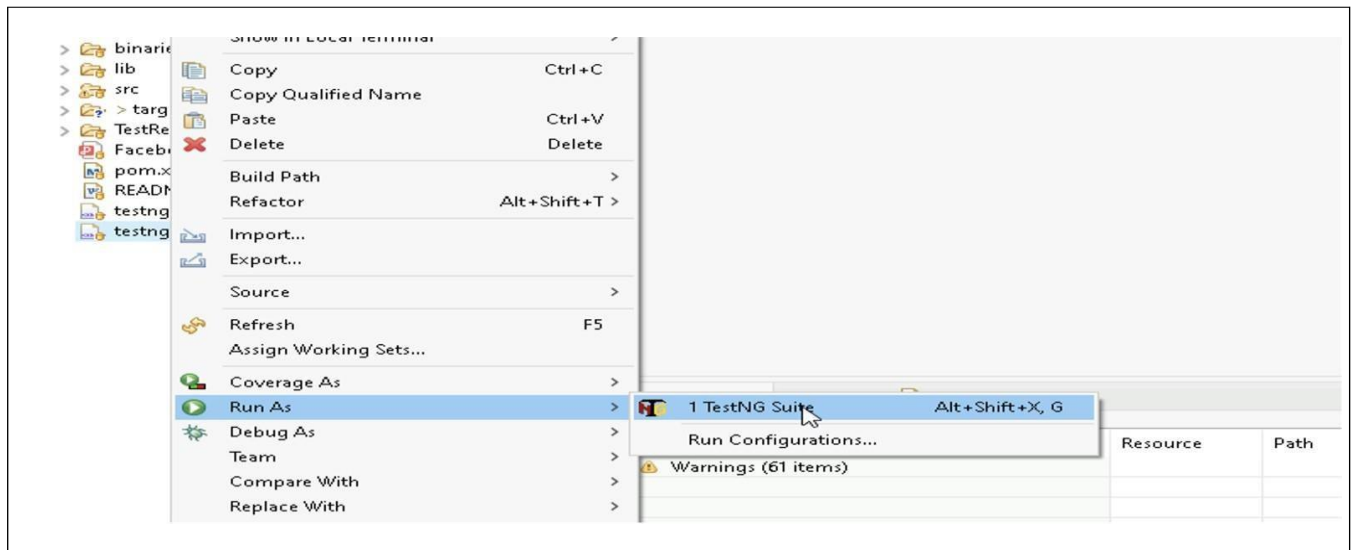
## IMPLEMENTATION/FUNCTIONAL REQUIREMENT

### 1.1 CODE QUALITY/OPTIMIZATIONS

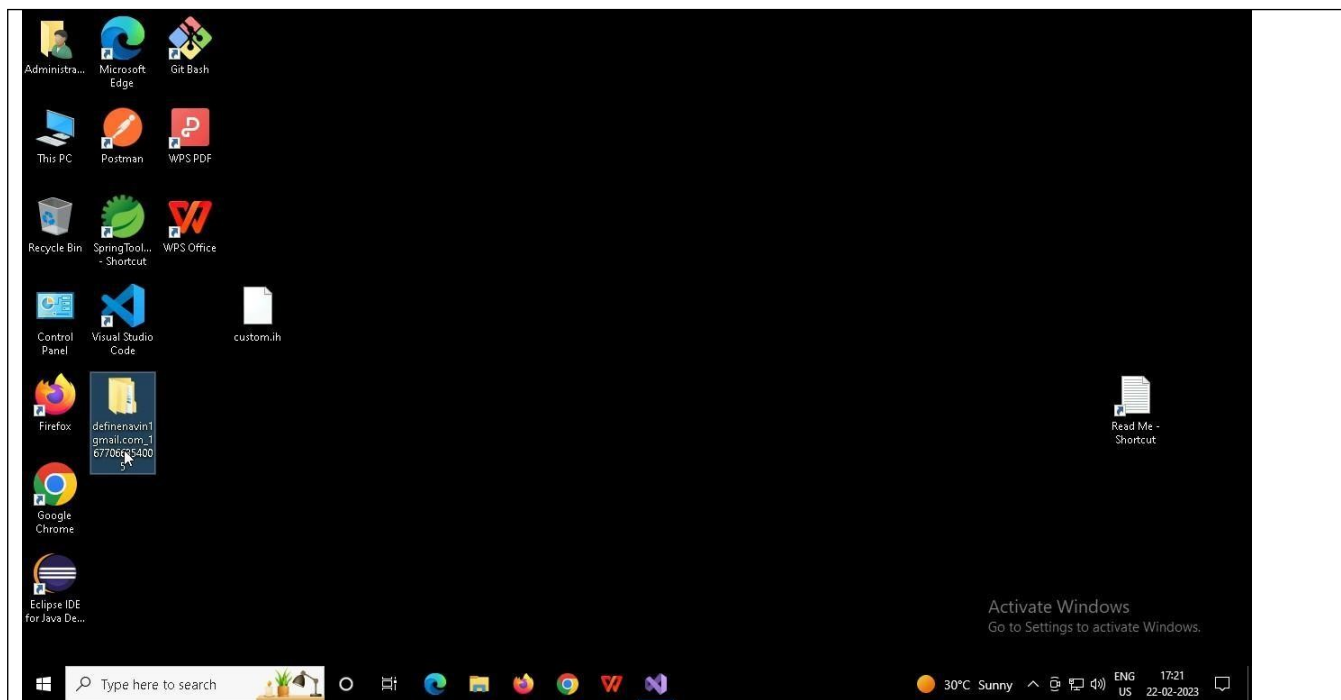
1. Associates should have written clean code that is readable.
2. Associates need to follow SOLID programming principles.

## EXECUTION STEPS TO FOLLOW

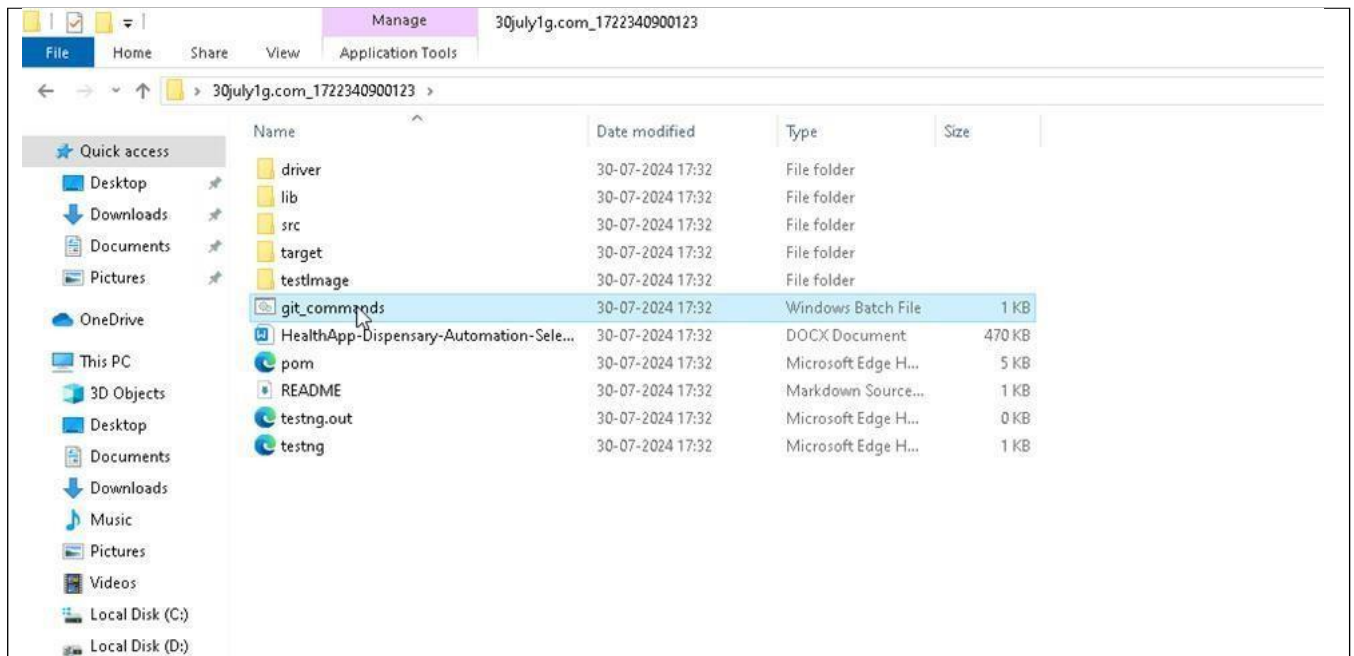
1. **You are mandatorily required to run test cases for applications before final submission. Without which project evaluation will not happen.**
2. **You can launch test cases any time as follows: Right click on testng.xml and run TestNGSuite**



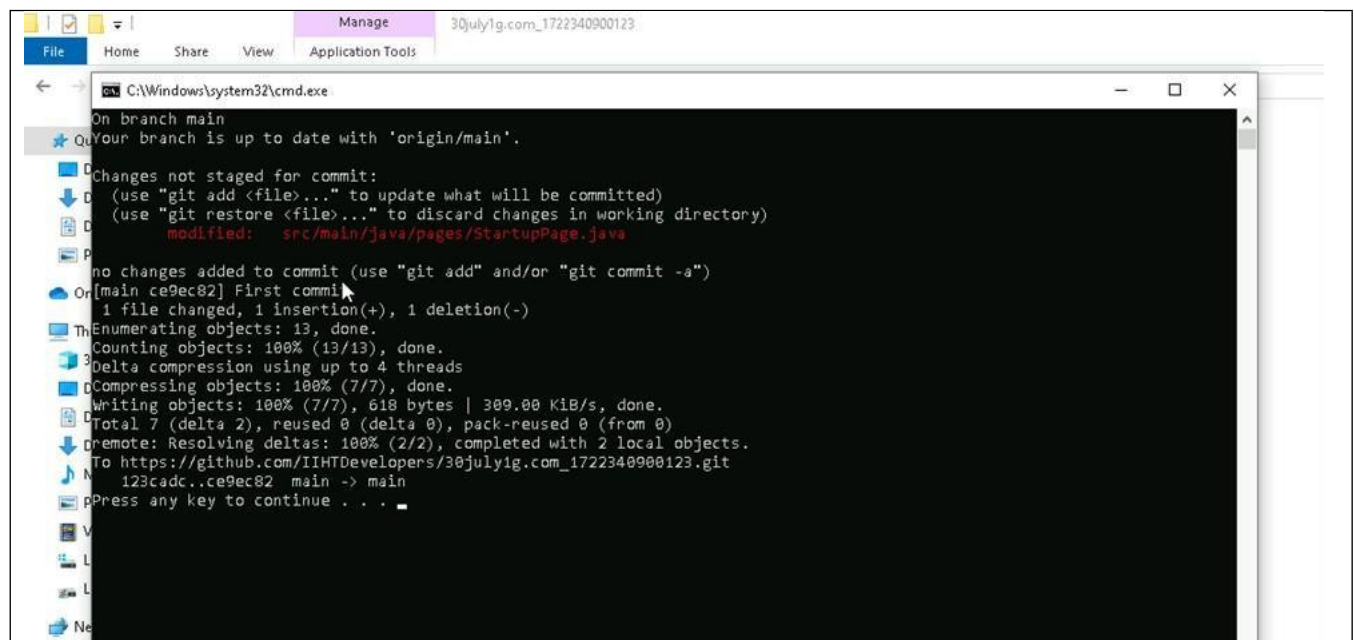
**3. Before final submission, you are also required to push your code to GIT. Following are the steps to follow:**



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.



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All the Best