**Reference**

**Test approach**

1. Selecting appropriate automation testing tool
   1. **Tools selected:** Java(JDK) 11, Selenium 4.2, Rest Assured 5.4
   2. **Test framework**: TestNG 7.10
   3. **Build tool/Dependency management:** Maven 3.6
2. Hybrid test automation framework with modules and data providers
3. Prioritize test cases (positive scenarios automated for API)
4. Please refer readme.md file for project details

**API Automation**

1. First I went through the Trademe developer portal (<https://developer.trademe.co.nz>) to understand the API details and how to access trademe APIs to automate requested APIs.
2. In order to access trademe APIs we need to have authentication tokens as they use OAuth 1.0 to authenticate calls.
3. In order to obtain an access token first I have registered an application as instructed under <https://developer.trademe.co.nz/api-overview/registering-an-application> (application name : api-thivanka)
4. The created membership email is [thivanka.jayasiri@gmail.com](mailto:thivanka.jayasiri@gmail.com) with username jayasiri
5. Once application is registered I obtained a consumer key and consumer secret to generate OAuth access token with <https://developer.trademe.co.nz/api-overview/authentication>
6. Then went through the API reference pages to identify APIs related to Retrieve Latest listing and List an Item.

API calls

1. Retrieve Latest Listings (Listing Methods)
   1. Base url- <https://api.tmsandbox.co.nz>
   2. End point - /v1/Listings/Latest.{file\_format}
   3. HTTP method - GET
   4. Authentication - Yes
   5. Supported format - XML, JSON
   6. Ref: <https://developer.trademe.co.nz/api-reference/listing-methods/retrieve-latest-listings>
2. List an Item (Selling Methods)
   1. Base url- <https://api.tmsandbox.co.nz>
   2. End point - /v1/Selling.{file\_format}
   3. HTTP method - GET
   4. Authentication - Yes
   5. Supported format - XML, JSON
   6. Ref:

<https://developer.trademe.co.nz/api-reference/selling-methods/list-an-item>

Note. Since there are lots of request body parameters I only used mandatory fields and a few optional parameters to build the request.

**UI Tests**

1. Customer Login Scenario
2. Verify whether Register and Login both link texts are clickable

Login module validations

1. Verify the user is successfully logged in when a valid email address and password is entered.
2. Verify that the system shows an error and unsuccessful login when an invalid email address and password is entered.
3. Verify that the system shows an error and unsuccessful login when a valid email address and incorrect password is entered.
4. Verify that the system shows an error and unsuccessful login when an invalid email address and incorrect password is entered.
5. Verify when an existing user is deleted from the backend, and trying to login with the same user email address system gives an error and login is unsuccessful.
6. Verify that the system gives a valid error message when trying to submit an empty value in the email address field.
7. Verify that the system gives a valid error message when trying to submit an empty value in the password field.

Field verification

1. Verify that the system shows a valid error message when the user entered invalid email address format.
2. Verify the minimum length and maximum length of text fields
3. Boundary value analysis with field length

**Listing an Item**

My trademe > Sell > List general item >

1. Verify when a user list an item it will display my trademe page.
2. Verify listing in only one category correctly shown
3. Verify listing in second category correctly shown
4. Verify listed item is correctly displayed under selected category
5. Verify all added details are correctly shown in the Confirm Page
6. Verify that once auction started listed item can be searched through the search box and within the category
7. Verify error validations