

Automation Plan/Structure

1. What website will be used to create automation framework on?

The website I will be using is one that is setup for automation practice. This website has a couple of features that can be automated via UI and even offers APIs to test those features.

The website that will be used is: <https://thinking-tester-contact-list.herokuapp.com/>

The APIs that will be used is:

<https://documenter.getpostman.com/view/4012288/TzK2bEa8#bcd848eb-d7ae-4b73-9a0c-59eb2254017e>

2. List out the tools that will be used and the purpose of the tool:

Selenium: Selenium is what drives the browser and how you control all website actions through code

Java: Java is the language that will be used to create the entire project

Cucumber: The framework will be BDD (Behavior Driven Development) so with the use of the Gherkin language (Given, When, Then) we can set up scenarios that are easy to understand the use of the test and its job.

Junit: There are many different frameworks that are used in automation. TestNG and Junit are the most popular amongst them. Junit is what is used on my current work project and is what is used for the actual automation process whether it is unit or component testing.

Extent Reports: This will generate reports after every given test run so we can see what steps in the scenario passed, failed, and skipped. This will come in handy to make sure when we run smoke/regression tests that nothing broke in the process of new releases, code changes, or slow servers. This is what we give to business managers, and product owners to demonstrate our work and what scenarios were added, if scenarios are broken, and more.

Postman: Postman will be the tool used for API testing. It is an open-source tool that allows us to check APIs, verify functionality, and also see if the server is working as expected skipping past the GUI aspect of automation testing resulting in faster test runs/

Jenkins: This tool is used for schedules pipeline runs. We call this CI/CD, or continuous integration/continuous deployment, which is to verify that with our automation test changes all our scenarios are working, the application is functioning properly, and to be notified of any failed tests that may arise, so we are aware of found bugs or broken code.

3. What dependencies will be used in the POM file?

There are a couple of dependencies we need for this project based off the tools mentioned above. All the open-source dependencies will be grabbed from:

<https://mvnrepository.com/>

Selenium: <https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java>

Junit: <https://mvnrepository.com/artifact/org.junit.jupiter/junit-jupiter-api>

Cucumber: <https://mvnrepository.com/artifact/io.cucumber/cucumber-java>

Extent Report: <https://mvnrepository.com/artifact/tech.grasshopper/extent-pdf-report>

WebDriver: <https://mvnrepository.com/artifact/io.github.bonigarcia/webdrivermanager>

- a. *WebDriverManager is needed so that we don't have to deal with updating drivers manually like chromeDriver (to automate chrome) gheckoDriver (to automate mozilla firefox) etc. Makes the automation process smoother.*

4. Website and API documentation screenshots:

Website:

Contact List App

Welcome! This application is for testing purposes only. The database will be purged as needed to keep costs down.

The API documentation can be found [here](#).

Log In:

Not yet a user? Click here to sign up!

<https://thinking-tester-contact-list.herokuapp.com/>

API Documentation:

POST Add Contact

<https://thinking-tester-contact-list.herokuapp.com/contacts>

HEADERS

Authorization

Bearer {{token}}

Body raw (json)

json

```
{
  "firstName": "John",
  "lastName": "Doe",
  "birthdate": "1970-01-01",
  "email": "jdoe@fake.com",
  "phone": "8005555555",
  "street1": "1 Main St.",
  "street2": "Apartment A",
  "city": "Anytown",
  "stateProvince": "KS",
```

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<https://documenter.getpostman.com/view/4012288/TzK2bEa8#bcd848eb-d7ae-4b73-9a0c-59eb2254017e>