

## BDD Automation using Behave, Selenium and Python

- Create a new project in PyCharm
- Install behave -- **pip install behave**
- Install behave HTML reporter -- **pip install behave-html-pretty-formatter**
- Install the Chrome Webdriver auto installer -- **pip install chromedriver-autoinstaller**
- Create a new folder called, **features**. This will contain all the project folders.
- Create a new sub folder called **helpers, features/helpers**. In this folder create the following files **pythonmethods.py, selectors.py, configs.py, seleniummethods.py** and **tempdata.json**. This is our implementation of the POM.
- Create a new sub folder called **reports, features/reports**. The generated HTML reports will be placed here.
- Create a new file, **login.feature** inside the **features** folder and write the BDD steps to this file.
- Create a new file, **loginsteps.py** inside the **features/steps** folder and write the Step definitions in this file.
- Create a new file, **environment.py** inside the features folder. This will contain all our Driver information along with Before and After methods.
- Create a new file, **behave.ini** in the root (outside the features folder). This will contain all our reporting setup.
- Follow the steps here to setup reporting: <https://pypi.org/project/behave-html-pretty-formatter/>

### Running commands

- **behave --no-capture** => Executes all the feature files and prints any print statement to the terminal
- **behave .\features\login.feature --no-capture** => Executes the login.feature file and prints any print statement to the terminal.
- **behave -n 'Test4' --no-capture** => Executes any scenario whose name contains 'Test4'.
- **behave --no-capture -f html-pretty -o features/reports/behave-report.html** => Executes all the feature files and stores the report in the reports folder.
- **behave --no-capture --tags=temp** => Executes only the scenarios with the tag 'temp'

### Guidelines

- All file names are in lowercase.
- All variables, methods, class names are in PascalCase.
- All feature files must start with **Given** and the last 2 steps must end with **When** and **Then**. This is because behave does not support **And** in the step definitions and steps using **And** will take the previous one, which is mostly **Given**.

### Minimum ensured things:

- Steps are sharable between Feature files seamlessly.
- DataTable support is present in Behave.
- Writing and Reading from a temporary file for passing data between steps, reducing the need of using global variables for the same.
- Before and After Hooks, for setting up the Driver and then cleaning up any created data.
- A reporting feature to create sharable HTML reports.

### Links

- GitHub repo: <https://github.com/JosefRichie13/BehavePython>
- Behave docs: <https://behave.readthedocs.io/en/latest/>
- Alternate HTML Reporter: <https://pypi.org/project/behave-html-formatter/>
- Chrome Webdriver Auto installer: <https://pypi.org/project/chromedriver-autoinstaller/>
- Edge Webdriver Auto installer: <https://pypi.org/project/edgedriver-autoinstaller/>

### Folder Structure

