Background

I wrote API tests for finding weather conditions of Bondi Beach defined in https://www.weatherbit.io/api/ to

- ➢ Find weather forecast for Bondi Beach
- ➢ Find weather forecast for Bondi Beach for the next given number of days
- ➢ Find if it had rained on the previous day
- ➢ Find if current temperature is between 20 to 30 degrees at Bondi beach and
- ➢ Find if it will snow in next 14 days

Tools/ Library Used

- ➢ Rest-assured library
- ➢ Cluecumber report plugin

Solution Components
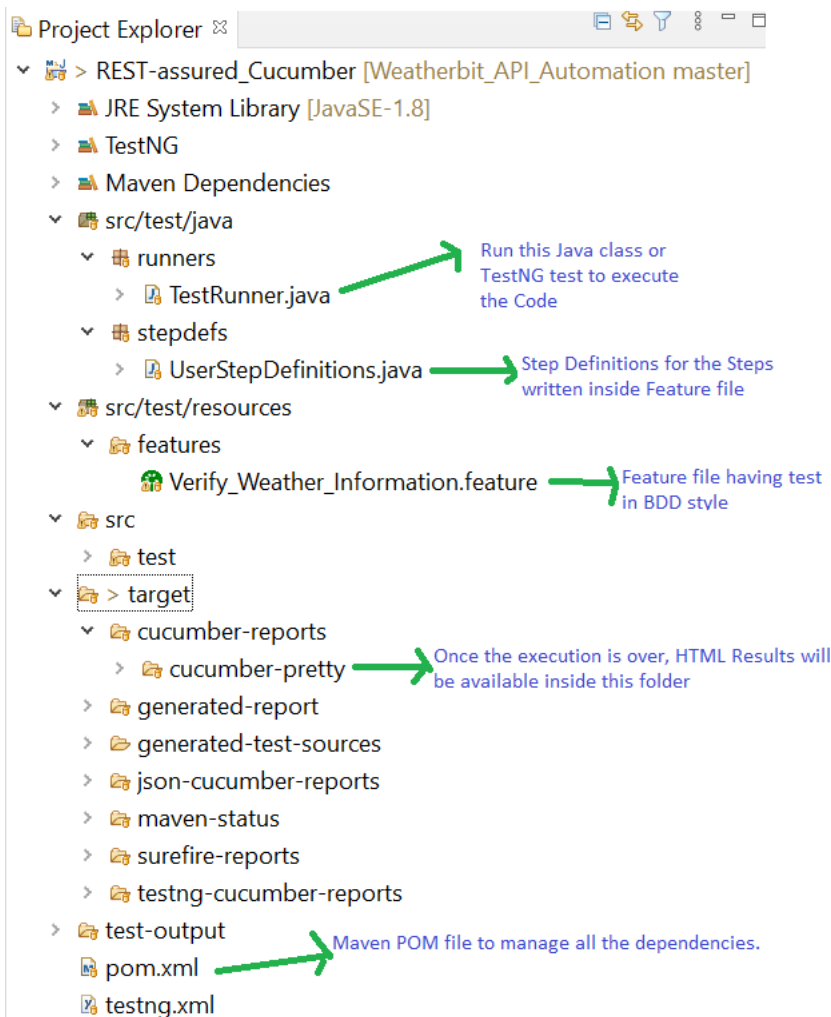
How to Execute?

Please follow below steps:

1. Ensure that Java and Maven is available on the machine.
2. Extract all the files from ZIP.
3. Launch Command Prompt.
4. Navigate to the project directory in CMD.


```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows [Version 10.0.17763.1397]
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C:\Users\sonra3>cd C:\Automation\REST-assured_Cucumber

C:\Automation\REST-assured_Cucumber>
```

5. Once done, run the below Maven command to trigger execution:
   - ***mvn clean test***


```
C:\WINDOWS\system32\cmd.exe - mvn  clean test

C:\Automation\REST-assured_Cucumber>mvn clean test
[INFO] Scanning for projects...
DURATION - 11037
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 19.863 s - in runners.TestRunner
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  26.959 s
[INFO] Finished at: 2020-09-06T07:20:53+10:00
[INFO] ------------------------------------------------------------------------
```

6. Once the execution is over, it's time to generate Report by using below command.
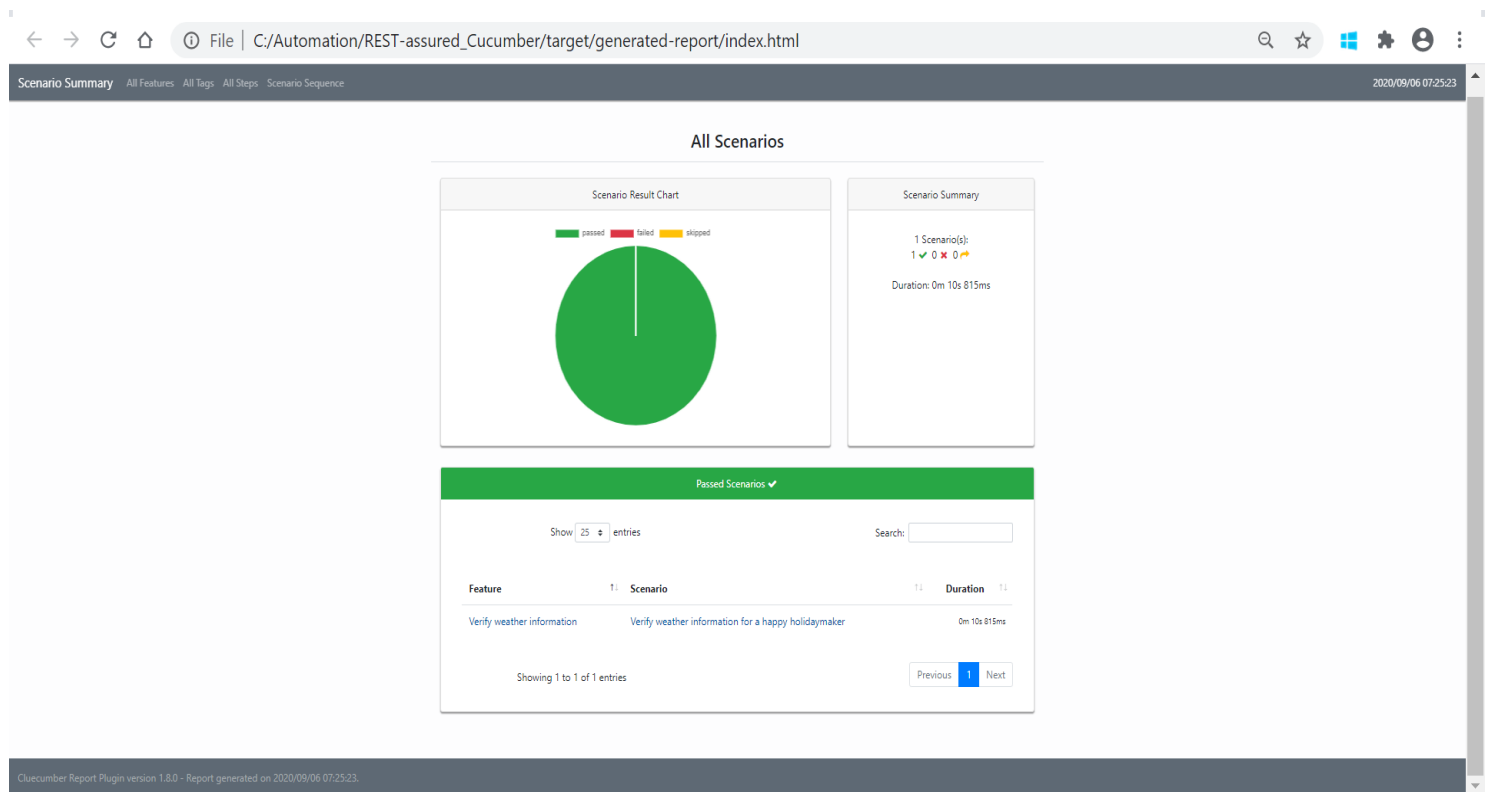
mvn cluecumber-report:reporting

```
[INFO] -------------------< io.weatherbit:weather-forecast >-------------------
[INFO] Building REST-assured_Cucumber 1.0
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- cluecumber-report-plugin:1.8.0:reporting (default-cli) @ weather-forecast ---
[INFO] ------------------------------------------------
[INFO]  Cluecumber Report Maven Plugin, version 1.8.0
[INFO] ------------------------------------------------
[INFO] - source JSON report directory    : C:\Automation\REST-assured_Cucumber\target/json-cucumber-reports
[INFO] - generated HTML report directory : C:\Automation\REST-assured_Cucumber\target/generated-report
[INFO] ------------------------------------------------
[INFO] - expand before/after hooks      : false
[INFO] - expand step hooks              : true
[INFO] - expand doc strings             : false
[INFO] ------------------------------------------------
[INFO] => Cluecumber Report: C:\Automation\REST-assured_Cucumber\target/generated-report/index.html
[INFO] ------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------
[INFO] Total time:  1.339 s
[INFO] Finished at: 2020-09-06T07:25:24+10:00
[INFO] ------------------------------------------------
```

7. Once the execution is over, open the index.html file from path highlighted in above screenshot.

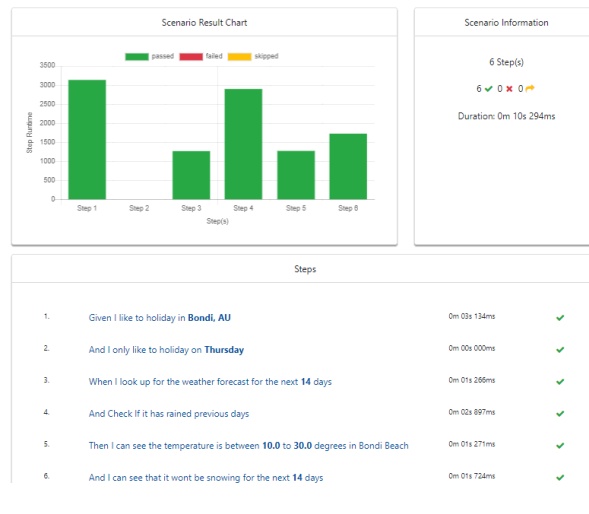# Execution Results

Once execution is completed successfully, HTML report will be generated, and will look like below:

Verify weather information
Verify weather information for a happy holidaymaker

Scenario Result Chart	Scenario Information

6 Step(s)

6 ✔ 0 ✖ 0 ↪

Duration: 0m 10s 294ms

Steps

1.	Given I like to holiday in **Bondi, AU**	0m 03s 134ms	✔
2.	And I only like to holiday on **Thursday**	0m 00s 000ms	✔
3.	When I look up for the weather forecast for the next **14** days	0m 01s 266ms	✔
4.	And Check If it has rained previous days	0m 02s 897ms	✔
5.	Then I can see the temperature is between **10.0** to **30.0** degrees in Bondi Beach	0m 01s 271ms	✔
6.	And I can see that it wont be snowing for the next **14** days	0m 01s 724ms	✔

Suggested Enhancements

Some of the ideas which is coming in my mind,

1. Currently the solution is Single Threaded, in future we can enhance this to multithreading.
2. Integration with CI/ CD tool.
3. Integration with Jira, so that Jira ticket will be updated by automation test itself.
4. Containers Implementations.
5. Can be integrated with tools like JACOCO or Sonarqube for Code Analysis.
6. We can write Groovy to capture execution logs from Jenkins console and have a summarized HTML page.
7. We can also work little more on Reporting to remove some of the print statements.