

This document provides the pre requisite to Run the project and information of the evidence generated

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Pre Requisite

- Pre Requisite
 - Java is installed and configured on the system
confirm by typing **java -version** on CMD prompt
 - Maven is installed and configured on the system
confirm by typing **mvn -version** on CMD prompt

```
D:\>java -version
java version "1.8.0_201"
Java(TM) SE Runtime Environment (build 1.8.0_201-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.201-b09, mixed mode)

D:\>mvn -version
D:\
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
```

RestAssured is used to send API requests

Selenium with Java is used to perform operations on UI

Steps to run the project

- Unzip the folder to any location
- Open CMD prompt, CD to the folder extracted above
- Run the following command

```
mvn clean test -DsuiteXMLFile=testng.xml
```

```
NDTV_Weather_API_Test>mvn clean test -DsuiteXMLFile=testng.xml
```

The variance for temperature difference set is as 10

The results with failures (Differences is greater than variance (10))

Difference between the temp_UI (captured on UI) and (temp_API captured using API)

```
ERROR] Failures:
ERROR] TestsWeather.getTemp:219 For city Jammu: The Actual temp is 20.0 and expected is 34.0 expected [34.0] but found [20.0]
ERROR] TestsWeather.getTemp:219 For city Karnal: The Actual temp is 21.899994 and expected is 33.0 expected [33.0] but found [21.899994]
ERROR] TestsWeather.getTemp:219 For city Patiala: The Actual temp is 21.01001 and expected is 34.0 expected [34.0] but found [21.01001]
ERROR] TestsWeather.getTemp:219 For city Hisar: The Actual temp is 23.980011 and expected is 35.0 expected [35.0] but found [23.980011]
ERROR] TestsWeather.getTemp:219 For city Chandigarh: The Actual temp is 21.179993 and expected is 34.0 expected [34.0] but found [21.179993]
ERROR] TestsWeather.getTemp:219 For city Srinagar: The Actual temp is 10.350006 and expected is 26.0 expected [26.0] but found [10.350006]
ERROR] TestsWeather.getTemp:219 For city Muzaffarnagar: The Actual temp is 21.459991 and expected is 33.0 expected [33.0] but found [21.459991]
ERROR] TestsWeather.getTemp:219 For city Panipat: The Actual temp is 22.790009 and expected is 33.0 expected [33.0] but found [22.790009]
ERROR] TestsWeather.getTemp:219 For city Dehra Dun: The Actual temp is 20.559998 and expected is 31.0 expected [31.0] but found [20.559998]
```

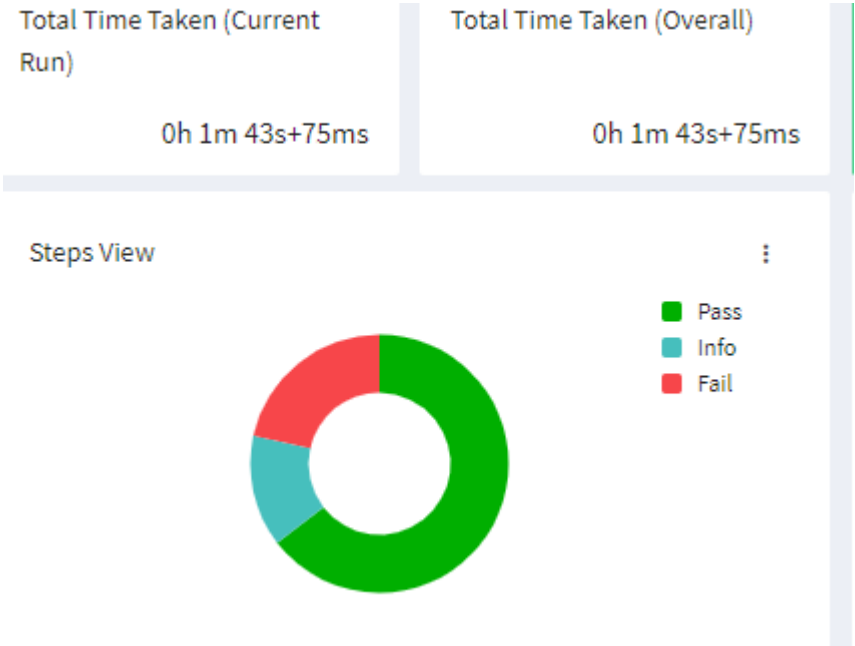
Description

- **MyLogger:** Log all the activities
- **Evidences Captured**
 - Screenshots – Evidences captured for all cities
 - JSON_Resp – JSON response captured for each city
- **APIUtils:** All methods to fetch Response, Status Code, Status Line, Response Header, etc
- **Utilities:**
 - **Common** utilities to tskeScreenShot, Select Value from list, Select value from Drop Down, Actions like Move to, Mouse Hover etc
 - **Constants:** maintain the values for URL, ApiKey, paths etc
- **Utils** to convert temperature.

- Capture all Cities
- Uncheck all cities on Pin your City List
- **UI (tempUI) Temperature**
 - Find the city on Pin your City
 - Check the city
 - Store the temperature in Degree C and F – Capture the screenshot
- **API (tempAPI) Temperature**
 - Get the JSON response for City above – Store the JSON Response
 - Get the temp in K from the JSON response
 - Convert temperature from Degree K to C
- . Find the difference (should not exceed the variance – set to 10)
 - Compare tempUI and tempAPI, if the difference exceeds 10 – mark the test as Fail and attach the screen shot captured

Result Generated

- .



Summary of Tests Passed



05:17:30



PASS: Difference between the API and UI temp: 5.0 for City Bengaluru is less than 10



05:17:30



PASS: Difference between the API and UI temp: 9.169983 for City Alwar is less than 10



05:17:30



PASS: Difference between the API and UI temp: 5.3099976 for City Bellary is less than 10



05:17:30



PASS: Difference between the API and UI temp: 7.130005 for City Ahmedabad is less than 10



05:17:31



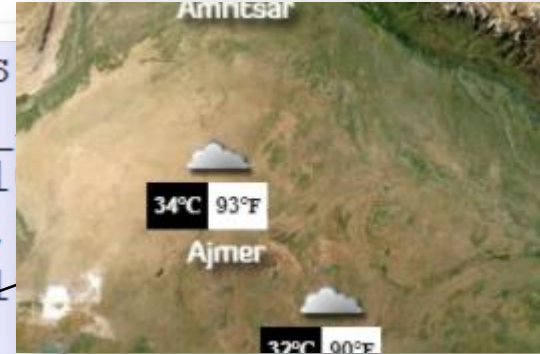
Summary of Tests Failed

STATUS	TIMESTAMP	DETAILS
✖	05:17:34	FAIL: Difference between the API and UI temp: 10.440002 for City Ajmer is greater than 10 
✖	05:17:35	FAIL: Difference between the API and UI temp: 16.0 for City Amritsar is greater than 10 
✖	05:17:38	FAIL: Difference between the API and UI temp: 10.369995 for City Bikaner is greater than 10 
		FAIL: Difference between the API and UI temp: 12.940002 for City Chandigarh is greater than 10

JSON Response and Logs Captured for a City

```
[{"coord":{"lon":74.63,"lat":26.45},"weather":[{"id":801,"main":"Clouds","description":"clouds","icon":"02n"}],"base":"stations","main":{"temp":296.71,"feels_like":296.71,"temp_max":296.71,"pressure":1007,"humidity":43,"sea_level":1000,"visibility":10000,"wind":{"speed":3.87,"deg":68},"clouds":{"all":23},"country":"IN","sunrise":1602723634,"sunset":1602765212,"timezone":1602723634,"name":"Ajmer","cod":200}]
```

Evidence captured from Response



Evidence on UI

INFO - Temperature on UI is 34.0 for City Ajmer
INFO - Get Temp using API
INFO - Temperature from API is 23.559998 for City Ajmer
ERROR - FAIL: Difference between the API 23.559998 and UI 34.0 temp: 10.440002 for City Ajmer is greater than variance set:10
INFO - Temperature on UI is 34.0 for City Amritsar

Evidence captured from Logs

Screenshots captured for all cities

02_Ahmedabad_1602719251411.png	10/15/2020 5:17 AM
02_Ajmer_1602719254294.png	10/15/2020 5:17 AM
02_Aligarh_1602719253231.png	10/15/2020 5:17 AM
02_Allahabad_1602719252639.png	10/15/2020 5:17 AM
02_Alwar_1602719250173.png	10/15/2020 5:17 AM
02_Amritsar_1602719255037.png	10/15/2020 5:17 AM
02_Bellary_1602719250795.png	10/15/2020 5:17 AM
02_Bengaluru_1602719248892.png	10/15/2020 5:17 AM
02_Bhilai_1602719252032.png	10/15/2020 5:17 AM
02_Bhilwara_1602719249418.png	10/15/2020 5:17 AM
02_Bhiwandi_1602719256047.png	10/15/2020 5:17 AM
02_Bhopal_1602719256741.png	10/15/2020 5:17 AM
02_Bhubaneswar_1602719257321.png	10/15/2020 5:17 AM
02_Bikaner_1602719257937.png	10/15/2020 5:17 AM
02_Bilaspur_1602719258503.png	10/15/2020 5:17 AM
02_Bokaro_1602719259109.png	10/15/2020 5:17 AM
02_Chandigarh_1602719259729.png	10/15/2020 5:17 AM
02_Chennai_1602719260534.png	10/15/2020 5:17 AM
02_Dehra Dun_1602719261806.png	10/15/2020 5:17 AM
02_Dhanbad_1602719263237.png	10/15/2020 5:17 AM
02_Dhule_1602719262566.png	10/15/2020 5:17 AM
02_Ganganagar_1602719263842.png	10/15/2020 5:17 AM
02_Gaya_1602719265713.png	10/15/2020 5:17 AM

Note: To reduce the upload volume the images are deleted from the folder

ToDo

- Capture the results in Excel sheet
- Convert the test in BDD
- Add a utility to email the report
- Run the test on different browsers
- Supply the data from excel sheet if required
- Email the report with evidences
- Integrate with ANT and CI

Thank You!