Test Plan

Definition of Done:

The user story is completed when the following activities has been done:

1. Back-end, front-end development and code review tasks related to the feature has been done.
2. Testing activities has been done (test design, test execution, closed related defects).
3. Related defects (high, major, medium priority) has been re-tested and closed.
4. All high-risk areas have been fully tested (including regression for similar areas).

User Story 1 (BY CITY NAME):

As Developer I want to access the weather resource to get current weather by city name so that I can call current weather by city name API endpoint .

API call:

api.openweathermap.org/data/2.5/weather?q={city name}

api.openweathermap.org/data/2.5/weather?q={city name},{country code}

Parameters:

q city name and country code divided by comma, use ISO 3166 country codes

API respond:

```
{
        "coord": {
                "lon": -122.09,
                "lat": 37.39
        },
        "sys": {
                "type": 3,
                "id": 168940,
                "message": 0.0297,
                "country": "US",
                "sunrise": 1427723751,
                "sunset": 1427768967
        },
        "weather": [
                {
                        "id": 800,
                        "main": "Clear",
                        "description": "Sky is Clear",
```

```
                    "icon": "01n"
                }
        ],
        "base": "stations",
        "main": {
                "temp": 285.68,
                "humidity": 74,
                "pressure": 1016.8,
                "temp_min": 284.82,
                "temp_max": 286.48
        },
        "wind": {
                "speed": 0.96,
                "deg": 285.001
        },
        "clouds": {
                "all": 0
        },
        "dt": 1427700245,
        "id": 0,
        "name": "Mountain View",
        "cod": 200
}
```

Acceptance Criteria:
- Ability to call by city name or city name and country code
- API responds with a list of results that match a searching word

Acceptance Testing:
- API is accessible throw APPID and returns status code 200
- API response data are equal to data on UI side
- API response is valid in connection with json schema

User Story 2 (BY CITY ID):

As Developer I want to access the weather resource to get current weather by city id so that I can call current weather by city id API endpoint .

Parameters:

id - City ID

API call:

api.openweathermap.org/data/2.5/weather?id=2172797

API respond:

```
{
        "coord": {
                "lon": -122.09,
                "lat": 37.39
        },
        "sys": {
                "type": 3,
                "id": 168940,
                "message": 0.0297,
                "country": "US",
                "sunrise": 1427723751,
                "sunset": 1427768967
        },
        "weather": [
                {
                        "id": 800,
                        "main": "Clear",
                        "description": "Sky is Clear",
                        "icon": "01n"
                }
        ],
        "base": "stations",
        "main": {
                "temp": 285.68,
                "humidity": 74,
                "pressure": 1016.8,
                "temp_min": 284.82,
                "temp_max": 286.48
        },
```

```
    "wind": {
            "speed": 0.96,
            "deg": 285.001
    },
    "clouds": {
            "all": 0
    },
    "dt": 1427700245,
    "id": 0,
    "name": "Mountain View",
    "cod": 200
}
```

Acceptance Criteria:
- Ability to call by city ID. API responds with exact result. List of city ID city.list.json.gz can be downloaded here http://bulk.openweathermap.org/sample/

- API responds with a list of results that match a searching word

Acceptance Testing:
- API is accessible throw APPID and returns status code 200
- API response data are equal to data on UI side
- API response is valid in connection with json schema

User Story 3 (BY GEOGRAPHIC COORDINATES):
As Developer I want to access the weather resource to get current weather by geographical coordinates, so that I can call current weather by geographical coordinates API endpoint .

API call:

api.openweathermap.org/data/2.5/weather?lat={lat}&lon={lon}

Parameters:

lat, lon coordinates of the location of your interest

Examples of API calls:

api.openweathermap.org/data/2.5/weather?lat=35&lon=139

API respond:

```
{
        "coord": {
                "lon": -122.09,
                "lat": 37.39
        },
        "sys": {
                "type": 3,
                "id": 168940,
                "message": 0.0297,
                "country": "US",
                "sunrise": 1427723751,
                "sunset": 1427768967
        },
        "weather": [
                {
                        "id": 800,
                        "main": "Clear",
                        "description": "Sky is Clear",
                        "icon": "01n"
                }
        ],
        "base": "stations",
        "main": {
                "temp": 285.68,
                "humidity": 74,
                "pressure": 1016.8,
                "temp_min": 284.82,
                "temp_max": 286.48
        },
        "wind": {
                "speed": 0.96,
                "deg": 285.001
        },
        "clouds": {
                "all": 0
        },
        "dt": 1427700245,
        "id": 0,
        "name": "Mountain View",
        "cod": 200
```

```
}
```

Acceptance Criteria:
- Ability to call by geographical coordinates. API responds with exact result.
- API responds with a list of results that match a searching word

Acceptance Testing:
- API is accessible throw APPID and returns status code 200
- API response data are equal to data on UI side
- API response is valid in connection with json schema

User Story 4 (BY ZIP CODE):

As Developer I want to access the weather resource to get current weather by city zip code, so that I can call current weather by zip code API endpoint .

Please note if country is not specified then the search works for USA as a default.

API call:

api.openweathermap.org/data/2.5/weather?zip={zip code},{country code}

Examples of API calls:

api.openweathermap.org/data/2.5/weather?zip=94040,us

Parameters:

zip zip code

API respond:

```
{
        "coord": {
                "lon": -122.09,
                "lat": 37.39
        },
        "sys": {
                "type": 3,
                "id": 168940,
                "message": 0.0297,
                "country": "US",
                "sunrise": 1427723751,
                "sunset": 1427768967
        },
        "weather": [
```

```json
            {
                "id": 800,
                "main": "Clear",
                "description": "Sky is Clear",
                "icon": "01n"
            }
    ],
    "base": "stations",
    "main": {
        "temp": 285.68,
        "humidity": 74,
        "pressure": 1016.8,
        "temp_min": 284.82,
        "temp_max": 286.48
    },
    "wind": {
        "speed": 0.96,
        "deg": 285.001
    },
    "clouds": {
        "all": 0
    },
    "dt": 1427700245,
    "id": 0,
    "name": "Mountain View",
    "cod": 200
}
```

Acceptance Criteria:
- Ability to call by city zip code. API responds with exact result.
- API responds with a list of results that match a searching word

Acceptance Testing:
- API is accessible throw APPID and returns status code 200
- API response data are equal to data on UI side
- API response is valid in connection with json schema