***Company name****:* *[OpenWeather](https://openweather.co.uk/)*

***Project Name:*** *[OpenWeatherMap. Weather API](https://openweathermap.org/api)*

## Test Plan

**Features to be tested:** API for the weather forecast([Current weather data](https://openweathermap.org/current), [5 day / 3 hour forecast](https://openweathermap.org/forecast5), [Weather map layers](https://openweathermap.org/api/weathermaps), [UV Index](https://openweathermap.org/api/uvi), [Weather stations](https://openweathermap.org/stations), [Weather alerts](https://openweathermap.org/triggers), [Air pollution](https://openweathermap.org/api/pollution/co)).

**Features not to be tested:**

* All features for the weather API available only for paid accounts([16 day / daily forecast](https://openweathermap.org/forecast16), [Bulk downloading](https://openweathermap.org/bulk), [History Bulk](https://openweathermap.org/history-bulk), [Historical data](https://openweathermap.org/history)). Test scenarios for some of these features will be created. Scenarios won’t be automated because we don’t have any access for the paid account.
* [Map styles legend](https://openweathermap.org/api/weathermaps" \l "legend), [Google Maps JavaScript API based on OpenWeatherMap API](https://openweathermap.org/api/weathermaps" \l "google2) and [Libraries to connect weather layers](https://openweathermap.org/api/weathermaps" \l "library) for [Weather map layers](https://openweathermap.org/api/weathermaps). Testing these features implies a significant increase in the estimated time, the extension of test tools and the change in the test strategy.
* All features that are not in scope.

**Test strategy:** Available documentation review, exploratory testing via requests, end-to-end scenarios creation for functional testing, automated REST tests creation and running, results analysing.

**Test tools:** *Google Chrome browser v. 67.0, Postman v6.0.10..*

**Item Pass/Fail Criteria:** After sending all requests we should get responses with the data and answer code which we expect.

**Estimate:** Documentation review - 3h, exploratory testing - 3h, scenarios creation - 6h, automation - 10, running of the tests - 1h, results analysing - 2h. **Total estimate time - 29h(for 1 person)**.

**Risks:**

1. There is not enough time for testing and automating the tests. Some tests will be made manually. Only high-priority scenarios will be automated. **Impact: high.**
2. Free access allows making only 60 calls per minute. If account exceeds the limits, then a notification about limits exceeding is sent. If it repeats again, then the account is blocked for an hour. Therefore, the lock period is increased by one hour until 4 hours block sets. When blocking repeats the fifth time, then the lock period lasts 24 hours. Multiple running of the auto tests can block test account. To minimize this risk we may need to create several test accounts for different test scenarios. **Impact: Medium.**
3. Time of the test activities were not agreed with the development. Some project changes can be provided during testing and some tests or test results would become not actual. **Impact: low.**

**Assumptions and Dependencies:**

1. During the all test activities project won’t be changed or these changes will not affect the testing process and the test results relevance.