**TEST PLAN**

1. **Purpose**

The purpose of Test Plan is a description of the <https://openweathermap.org> site API testing process. The document provides a testing instruments, evaluation criteria, forms and types of the planned testing, necessary equipment.

**2. Scope**

The purpose of testing the <https://openweathermap.org> site is to verify the correct operations of its functionality via API requests. Testing is planned to conduct in automation mode with Postman app.

**In-scope items:** functional testing, load testing, security testing.

**Out of scope items:** UI testing, compatibility testing, usability testing, performance testing, localization testing, database testing.

**3. Test Strategy**

Functional, security and load testing via sending Api requests and getting responses. The received server responses are checked for compliance with the documentation <https://openweathermap.org/api>

**4. Testing Types**

**4.1. Functional Testing**

*Items to be Tested:* Current weather, 5 days/3 hour forecast, Weather maps, Weather stations, UV index (beta), Air pollution (beta), Weather alerts (beta).

*Not Tested Items:* 16 days/daily forecast, Hourly historical data for cities, Bulk download.

**4.2. Load Testing**

*Items to be Tested:* Calls per minute for free account.

*Not Tested Items:* Calls per minute for paid plan.

**4.3. Security Testing**

*Items to be Tested:* Testing with API keys usage and without keys, requests with invalid keys.

*Not Tested Items:* Testing with API keys of paid account.

**5. Test Approach**

Automated testing of available data for free account. The tested items are divided into logical groups by content and priority groups based on business importance and common sense. High priority items are tested first.

**6. Pass/Fail criteria**

*Pass Criteria:* No blockers or critical issues, all High and medium tests passed.

*Fail Criteria:* at least one test with high or medium priority passed with a result "Fail". At least one critical bug or blocker found

**7. Test Entry / Exit Criteria**

*Entry Criteria:* Test environment is ready for use (referred to in paragraph Test Environmental / Staffing / Training Needs); Checklist is written; Autotests based on checklist are ready to launch.

*Exit Criteria:* Testing on all the checklist items for free account is done.

**8. Test Deliverables**

Checklist in .xlsx file, Test Report in .docx file.

**9. Test Environmental / Staffing / Training Needs**

*Hardware / software environment:* workstation connected to Internet with Chrome; Postman app downloaded and installed ; free account with API keys on <https://openweathermap.org>

*Staff:* 1 QA engineer