Test Plan   
OpenWeatherMap API v2.5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Author** | **Revision Date** | **Approver** | **Description** |
| 1.0 | QA | 31.05.2018 | DevChallenge Judge |  |
|  |  |  |  |  |
|  |  |  |  |  |

Table of contents

1.Introduction1

2.Scope2

2.1 Features to be tested2

2.2 Features not to be tested2

3.Test Types2

3.1 Exploratory testing2

3.2 Usability testing2

3.3 Security testing2  
3.4 Test Automation2  
3.5 API Documentation2

4.Pass/Fail Criteria2

5.Tools3

6.Testing Deliverables3

1. **Introduction**

This test plan describes the testing approach of the **OpenWeatherMap**  **API v2.5. OpenWeatherMap** is an online service that provides weather data, including current weather data, forecasts, and historical data to the developers of web services and mobile applications. Phase 1 of the testing process include testing of FREE price plan users functionality. After ending of Phase 1 software test team will deliver test artifacts and automated tests for testing API for FREE price plan users.

1. **Scope**

The initial phase will include all requirements for FREE price plan users.  
 **2 .1 Features to be tested**

The test scope for Phase 1 includes the following API modules:

* Current Weather for one city;
* Current Weather for several cities;
* 5 day / 3 hour forecast weather;
* Weather map layers;
* Air pollution (beta);
* Weather alerts (beta);
* UV index (beta).

**2.2 Features not to be tested**

The following are considered out of scope for Phase 1:

* STARTUP, DEVELOPER, PROFFESIONAL, ENTERPRICE price plans functionality.

1. **Test Types**

**3.1 Exploratory testing**

Exploratory testing is an approach to software testing that is concisely described as simultaneous learning, test design and test execution. Exploratory testing will be performed without any tests scripts and will give opportunity to explore API with learning its main functionality and input data. Can find critical bugs before next testing stage will start.

* 1. **Usability Testing**

API Usability testing checks whether the API is functional and has a convenient interface, and also checks how easily it integrates with other services.

* 1. **Security Testing**

API Security testing verifies the type of authentication used and data encryption using HTTP.

Also this type include testing of that each price plan has access to its own features.

* 1. **Test Automation**  
      Creation of scripts, programs or customization that will test the API on a regular basis.
  2. **User Documentation**

The descriptions completeness of API functions, its clarity, and, in turn, is the final result.

**4. Pass/Fail Criteria**

**Pass criteria:** 100% of tests from Checklist.xlsx with High and Medium priority should be passed. 0 of bugs with High and Medium priority should not be.  
 **Fail criteria:** There is at least 1 bug with High or Medium priority.

1. **Tools**

* Postman
* Intellij Idea Community Edition
* Java
* Maven
* Microsoft Office Word
* Microsoft Office Excel

**6. Testing Deliverables**

Planned testing deliverables which include:

|  |  |
| --- | --- |
| **Deliverable** | **Date / Milestone** |
| TestPlan.docx | 3 June 2018 |
| Checklist.xlsx | 3 June 2018 |
| TestReport.docx | 3 June 2018 |
| Automated test scripts | 3 June 2018 |
| Bugs.xlsx | 3 June 2018 |