Test Plan

OpenWeatherMap API v2.5

Version	Author	Revision Date	Approver	Description
1.0	QA	31.05.2018	DevChallenge Judge	

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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.

2. 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.

3. 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.

3.2 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.

3.3 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.

3.4 Test Automation

Creation of scripts, programs or customization that will test the API on a regular basis.

3.5 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.

5. 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