

IPK 2018/2019 FIT VUT

First Project Documentation

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1. Introduction

This is a lightweight *OpenWeather API* client written in Python3.

2. Implementation

2.1 Libraries

My implementation works with 3 libraries.

- *sys* - Required for obtaining arguments
- *socket* - Required for establishing connection with the API.
- *json* - Used for parsing JSON data aquired from the server

2.2 Code

Code is accessible in file *xjurig00.py*.

It is structured into multiple functions, which are used for generating *URL* and *HTTP GET* request. Connection attempt and data retrieval are enclosed in a *try-except block*. In case of exception, error message is displayed and the client is exited. In case the connection is established, data is downloaded and checked for *HTTP 200 OK* code. This data is parsed and displayed to the output.

3. Usage

3.1 Prerequisites

To be able to use this client, you will need an *API key*. It can be easily obtained [here](#).

There are multiple options which vary in price, availability and API calls per minute. Free tier can use up to 60 calls per minute.

3.2 Use

make run api_key=<KEY> city='<CITY>'

Where:

<KEY> is a 32 character long API key,

<CITY> is the name of the city you wish to search for

Usage notes:

- This client works with *UTF-8* encoding, therefore you can use all supported characters.
- It is case insensitive.
- Apostrophes are optional when searching for single word city names.
- Using this application without following the usage manual (section 3.2) may lead to unexpected events and/or behavior.