

AirportCodeDecoder

v. 0.1

Technical documentation

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What is AirportCodeDecoder

AirportCodeDecoder (*later: app, application*) is a non-commercial, terminal application for Windows, written in Python 3. Its main goal is to translate the entered IATA or ICAO airport code and provide information about the selected airport, its location and local time to the User, using real time data provided by FlightRadar24.com

Second main goal is to document bug finding, fixing and updating a real application.

AirportCodeDecoder is created and maintained only in English.

What is IATA code

IATA - International Air Transport Association - created a code system for different aviation structures, like airport, airline or flights to unify them and be usable in every country.

The IATA airport code contains 3 characters. It's tied to specific airports, and it's mostly known by passengers because it's widely used in the airline travel industry, covering schedules, flight statuses, baggage tags, ticketing and booking, etc. They're the most recognized codes due to their use by airlines to provide services for passengers. IATA codes are also assigned to some other locations tied to travel, like train and bus stations.

AirportCodeDecoder covers only airport codes.

Examples of IATA airport codes:

WAW - for Warsaw Chopin Airport

or

DXB - for Dubai International Airport

What is ICAO code

ICAO - International Civil Aviation Organization - its the first organization to create and introduce any international security measures or law used in aviation.

ICAO 4-letter code covers a wide purpose of civil aviation operations, including general and business aviation. ICAO codes are used on air traffic control (ATC) flight plans and in air navigation services. They're heavily used by pilots, dispatchers rather than passengers and

other people strictly connected to them like check-in staff or customer service. This code is connected more to location than airport. First character means region, second - country, last 2 - more detailed location (usually city). Similar to IATAs, ICAO codes can be assigned to locations like train or bus stations.

AirportCodeDecoder covers only airport codes.

Examples of ICAO airport codes:

EPWA - for Warsaw Chopin Airport
E - Europe / **P** - Poland / **WA** - Warsaw

OMDB - for Dubai International Airport
O - Persian Gulf / **M** - United Arab Emirates / **DB** - Dubai

Running the App

Currently, app can be run only by 2 different scenarios:

1. Copying the source code into the IDE and running the terminal.
2. Using cmd command ***Python AirportCodeDecoder.py*** inside the directory where the file is downloaded.

*In both scenarios it is a **requirement to pre install Python.***

Using the App

1. After opening the app, the User will be asked to enter IATA or ICAO code.
2. After entering the code, the application will connect to FlightRadar24.com website and ask for existing data.
3. The data is received as JSON format.
4. The received data will be prepared::
 - a. Full name of the airport
 - b. IATA and ICAO code (doesn't matter which one User entered)
 - c. Location (city and country)
 - d. Local time
5. Printing the data on the terminal