

Advanced Python for Data Science, Msc. AIBA

Final Project: Create a data app

Project context

Data apps are a category of apps specifically geared towards helping teams easily manage data-intensive operations.

Data operations can be in the form of Excel macros, or python scripts living in a Jupyter notebooks. Transforming those macros and python scripts into data apps allows to spread the benefits of their insights beyond the data analytics teams, to marketing, sales, or business teams — people who need them in their daily work.

Project description and goal

The aim of this project is to apply advanced python skills to build a data app. The subject of the data app is left to the student to choose. However, the data app should have at least the following characteristics or features:

1. **Data Import**; this can be an Excel spreadsheet, CSV file, Database query or data streaming.
2. **Data Visualisation**; the data app displays one or more charts.
3. **User Input**; at least one; this can be text/number input, file upload, selection from choices, ...
4. (Bonus) **External Interaction**; this can be calling a machine learning model served with a REST API for example.

Examples of data apps

- Exploratory Data Analysis of an open-source dataset
- A classification task app
- A Sentiment Analysis app
- A decision helper backed by a machine learning model

You can also transform into a data app any of your previous data projects written in Python.

Evaluation

The project will be scored over 20 points, distributed as follows:

- The first three features above will reward 4 points each.
- Code compliance with PEP 8 will reward 5 points.
- a 10/10 pylint score will reward 3 points. Lower scores will be divided by 4 and added to the project's score.
For example, pylint returns a score of 6.50/10, this will add 1.7 points to the project's score.
- The bonus feature will reward 2 points.