Feedback | Group 7

Table of Contents

- Milestone 1 Tasks
- Milestone 1 Feedback
- Milestone 2 Tasks
- Milestone 2 Feedback
- Milestone 3 Tasks
- Milestone 3 Feedback
- Milestone 4 Tasks
- Milestone 4 Feedback
- Demo
- Final Grade

Milestone 1

Problem Definition | 20 points

The problem is defined correctly, and the structure is kept.

- Broad Area of Interest
- Preliminary Research
 - Current trends
 - o Opportunities
- Solution with Methodology
 - o Data Collection
 - Analytical Techniques
 - Implementation Plan
- Expected Outcomes
- Evaluation Metrics

Grade: 20

Roadmap | 10 points

The roadmap seems realistic.

Grade: 10

Administrative Tasks | 5 points

- Roles are assigned
- · Preliminary discussion with me was done
- · Slack channel is created
- · Github Repo is created

Grade: 5

Technical Tasks | 5 points

- Proper <u>gitignore</u> file is available
- The Requirments.txt file is available, indicating that venv was created
- The first chapter of the Package Development course is done by everyone

Grade: 5

Grade

Overall, you did a really great job during the M1. Keep it like that!

Final Grade: 40/40

Milestone 2 | Tasks

Product and Project Manager | 40 points

- 1. Name your Python package: register to pypi
- 2. Install mkdocs package to start with the documentation
- 3. Database schema: Provide your product database structure (ERD)
- 4. Transform your project file structure according to the below tree

```
PythonPackageProject/ #githhub repo
  — yourpackagename/
     — __init__.py
      — submodule1/ #database related
          – init .py
        ___ submodule1_1.py
    └─ submodule2/ #model related
          — __init__.py
        └─ submodule1_2.py
     └─ submodule3/ # api related
         — __init__.py
          submodule1_2.py
  - tests/
     — __init__.py
      - test_module1.py
    └─ test_module2.py
 — example.ipynb # showing how it works
l— run.py # in order to run an API
 — docs/ #this folder we need for documentation
| — .gitignore
| — requirments.txt
 - README.md
  LICENSE
 — setup.py
```

Data Scientist and Data Analyst | 20 points

- 1. Simulate the data if you need
- 2. Try to use the CRUD functionality done by DB Developer
- 3. Work on modeling part using simple models

```
from yourpackage.submodule2 import modelname
```

Database Developer | 30 points

- 1. Create a DB and respective tables suggested by the Product Manager
- 2. Connect to SQL with Python

- 3. Push data from flat files to DB
- 4. Test the code provided here and complete the missing components
- 5. Add extra methods that you might need throughout the project:
 - 1. Communicate with PM and API Developer for custom functionality

from yourpackage.submodule1 import sqlinteractions

API Developer | 30 points

- 1. Communicate with DB Developer and PM in order to design the API
- 2. You can create dummy endpoints in the beginning, then communicate with PM as well
- 3. The following endpoints must be available:
 - 1. GET
 - 2. POST
 - 3. UPDATE

Check out this this repo.

from yourpackage.submodule2 import api

Milestone 2 | Feedback

- Add some description in README.MD, which is going to be a description on pypi
- Make sure to add minimal requirements for the setup.py
- I would also recommend to keep logger module and use it instead of print() function
- I removed apivenv, no need to have it in the repo, put it in gitignore

DataCamp

Done by everyone.

Product and Project Manager | 40 points

- 1. The package is not registered in Pypi or I couldn't find it
- 2. mkdocs package is not in the requirments.txt
- 3. The schema is provided
- 4. Partially done:
 - 1. Note: you need to provide the references in the __init__.py files, in order to import modules, submodules etc.
 - 2. requirments.txt file is not updated: uvicorn package is not there. Make shure to update it, otherwise run.py will not work
 - 3. db folder: csv files must be out of the package. Remember the user is going to import your objects from the CRR package and provide flat files.
 - 4. setup.py is empty, here you need to provide package information(check the datacamp course)
 - 5. in the package, you cannot have GenerateCsv.ipynb, see the point 3 Grade: 20/40

Data Scientist and Data Analyst | 20 points

- The data was successfully simulated/ingested
- modeling module was initiated, and tested.
- Again guys, ipynb files are not accepted to have inside of the package, you need to import the
 the package and then start making experiments.

Grade 15/20

Database Developer | 30 points

- DB and schema was successfully implemented
- Connection between SQL and Python is available
- The Data is loaded
- Custom functions are available in db_interactions.py file
- absolute path in dp.py file row 85

Grade: 15/30

API Developer | 30 Points

run.py is working properly

- Requests:
 - o POST request is available
 - GET request is available
 - PUT(update) request is not available

Grade: 30/30 Good Job!

M2 Grade: 80/120

Milestone 3 | Tasks

Remaining tasks from M2

- fix __init__.py files
- create a seperate data folder out of CRR and put all the csv
- move ipynb files out of package try it externally as required in M2
- fix setup.py
- fix absolute path!
- I have updated the requirments.txt

DataCamp

Complete the third chapter.

Product and Project Manager | 30 points

- 1. Design the final endpoints:
- the outputs you need for modeling
- the outputs you need to analyze the study
- 2. Communicate the outputs with the team in order to help them create/modify final classes/methods, etc.
- · design query functions according to your needs
- · design modeling components according to your needs
- 3. Create sample documentation using mkdocs. Once you have the final version of a package, you'll update it. For now, push to GitHub the following:
 - o a selected template
 - index.md page1 and page2 with dummy content (though you are free to provide actual documentation as well)

Data Scientist and Data Analyst | 30 points

- Create a model based on the Product Manager's requirements (or improve the existing file and ingest the output to DB)
- Insert the outcome into the respective SQL folder. (communicate with the Product Manager and DB developer in case you need extra table and/or functionality)
- Data Analyst must try to:
 - o interpret the model
 - create custom visualizations
 - o suggest/support Product Manager to make decisions about product's final design

Database Developer | 30 points

- Based on the new/updated requirements, provide functionality in order to interact with the DB
 - API developer might need customer functionality for the final endpoints

• Data Scientist/Analyst developer

API Developer | 30 Points

- make your requests directly from the Database and update based on Product Manager's request
- Note: you can make endpoints to test the data as well get_something().

Milestone 3 | Feedback

Ramaining tasks from M2

All done!

Datacamp

Done by Everyone!

Product and Project Manager

- Final endpoints are provided
- Sample documentation is provided

Grade: 30/30

Data Scientist

• The "predictive model" is created

• Data Analytics is done

Grade: 30/30

Database Developer

All done!

30/30

API Developer

All done!

30/30

Good job! Grade: 120/120

Milestone 4 | Tasks

1. Documentation 30 points

- Create comprehensive documentation using MkDocs.
- Each module (e.g., API, database, logger, model) should have its own dedicated page within the documentation.
- The first page should provide a high-level overview detailing the Problem, Solution, and Expected Outcomes.
- Host the completed documentation on GitHub Pages.

2. README.MD 25 points

- The README file is also going to be the first page description in pypi.org. So make sure to make it as informative as possible.
- o mkdocs weblink
- steps using the package
- API GET Requests (the links which are showing up in the swagger under the each endpoint)
- o put it in setup.py (in order to make it available on pypi)

3. Requirements and Environments 15 points

- o Develop at least two requirements.txt files to manage dependencies more effectively.
 - package_requirement.txt
 - docs_requirements.txt
- Create two separate virtual environments
- for the main package (excluding ipykernel or notebook and other not directly related packages)
- o building the documentation

4. Repository Management 15 points

- Clean up the repository to ensure it contains no extraneous files.
- Host the main package on PyPI.

5. Demonstration Notebook: 15 points

- Provide an example.ipynb file outside of the main package.
- This notebook should demonstrate at least two scenarios where the solution is applied effectively Grade: 30/30

Milestone 4 Feedback

Documentation

- The MkDocs weblink is missing.
- The docstrings are not properly written:
 - in the sql_instersection.py the data types of the arguments are missing

Grade: 27/30

README.MD

- Readme is included the setup.py
- The MkDocs weblink is provided
- · Readme is well designed

Grade: 25/25

Repository Management

Here everything is fine.

Grade: 15/15

Requirements and Environments

Here everything is fine.

Grade: 15/15

Demonstration Notebook

Perfect!

Grade: 15/15

M4 Grade: 100/100

Demo | 20 points

You need to introduce the product with 10 minutes.

The presentation format:

- Slide 1: The Problem
- Slide 2: Solution
- Slide 3: The problem solving methodology
- Slide 4-5: Demo
 - Anything you'd like to show
 - o business case scenario 1
 - o business case scenario 2

Demo Grade: 20/20

Final Grade

Grade: 360/400