

C-DE211: Data Analysis

Project Specification Document

Project 2 is worth: 30% of the course grade

Submission Guidelines

Each Team Coordinator is expected to create a gitHub Repo. (dataroom) with the following documents and she/he needs to make sure that the access is allowed for (mohamed.taher@eui.edu.eg, nadine.elsaeed@eui.edu.eg and shereen.elfayoumi@eui.edu.eg)

These submissions should also be submitted to the submission link on Canvas before the published Due Date.

Useful Guidance

You may consider using the following:

1. **Dataset:** Good places to find Datasets:
 - o <https://datasetsearch.research.google.com/>
 - o <https://www.kaggle.com/datasets>
2. **Report:** Please follow the provided [Report template](#) to make it consistent.
3. **Poster:** A demo video [Here](#), [Here](#) and [Here](#).
4. **Demo Video:** record a short video of 2-3 minutes max that illustrates your idea while displaying your presentation/Poster.
5. **Contribution sheet:** to insure fairness please mention each member's task (percentage of work done)

Deadlines and Submissions

Each team is expected to maintain an up-to-date repository while submitting the deliverables in the following order:

Deliverable	Due Date
Teams Formation	Wednesday May 7, 2025
Python notebook X.ipynb	Saturday May 24th 11:59 PM
PowerPoint or Poster	
1. Demo Video (3 mins) 2. Detailed Contribution Sheet 3. Report	
gitHub repo. Link	
Demo Day	

You may find these topics interesting while choosing datasets:

1. Sustainability
2. Agritech.
3. Smart homes, smart meters.
4. Social network analysis
5. E-commerce data analysis
6. Traffic and road network analysis
7. Cryptocurrency and stock data.

Grading Structure:

- **7 marks** → Ipython Notebook
- **8 marks** → Report
- **5 Marks** → Proposal
- **5 marks** → Poster / PowerPoint
- **2 marks** → Share:

Each member of your team will be evaluated based on the quality of work done in the analysis of the project.

- **1 mark** → **Creativity and Innovation:**
Your team will be evaluated based on the creativity and innovation shown in the chosen method of enhancing the nominated project, poster and report.
- **2 marks** → **Presentation:**
Your team's oral presentation will be evaluated based on clarity, effectiveness, and professionalism.
- **3 Marks bonus** → if you were able to create real video (short video)

Total Marks: 30

Tips

Make sure your:

- Use a dataset that is related to Egypt. You are not limited to that but please pick an interesting dataset.
- Formulate a hypothesis on the dataset, test it and provide all the code for visualization and hypothesis testing.
- Write a full report following the template supplied to discuss the dataset, results and your conclusions.
- Create a powerpoint or a poster which will evaluate your visualization and presentation of the research question.
- Make the video in such a creative self explanatory way that it could be nominated for the top 5 projects of this Semester and join the upcoming open days.

Deadline:

The deadline for this project is 24/5/2025.

Rehearsals will be during labs, and the demo day is on 26/5/2025.

HELP & SUPPORT

The TAs are here to support you if you get stuck at any point of time. You can come and ask during office hours to get a sense of how the project should work if you are still unsure or want to double check anything. And of course, feel free to ask for help (we encourage you to do so) whenever you want and can, whether in person or via email. It makes us happy to help you whenever we can.

KEEP IN MIND:

- All Due Dates are subject to the above dates before 23:59pm
- Deliverables must be added to your project's github repository AS WELL AS being submitted in their submission links on the canvas before the dues dates.
- Contribution Sheet.xls: Share detailed table of each member's exact contribution in the project.