Project description

Team of students (at most 6 and maybe 7 for some exceptions) will work on a data science problem related to the theme, “Data Science for Social Good in Türkiye”, and they will collect, analyze, and present their predictive and exploratory analysis.

In this course project we are looking for a creative and comprehensive analysis of data. We evaluate project based on

- **Data source**: Readily available data is OK, but creative hypothesis and analysis will be required. You can also collect your own dataset to address some novel questions.You are expected to analyze the dataset about Türkiye.
- **Data analysis**: Detailed explanatory analysis to provide background about the data you have. Building predictive models or use of unsupervised learning approaches for the analysis is expected.
- **Data visualization and reporting**: Proper use of data visualization is necessary and reporting data using interactive visualization is encouraged.

Deliverables

Your project will have several deliverables.

- **Project report**: You will be writing a report explaining i) data source and how you access it, ii) processes to clean and standardize data, iii) hypothesis you have and research questions asked with that data, and iv) findings and results.
- **Codebase**: You will be sharing a repository where codes are organized and explained with a readme file.
- **Video presentation**: You will be sharing a video report introducing the team members, presenting the data, the analysis conducted, and the findings for your hypothesis. Maximum length for the video will be 10 minutes.

Grading

Each project team will be graded by multiple mechanisms for different aspects of the project.

Project proposal (20%): To ensure project teams are formed and they have already started developing concepts for their projects, we will ask for information regarding each team and their project. You will need to fill a Google Form to provide details about your datasource, team members, hypothesis and questions of your projects. (https://forms.gle/P6cxuQsxkHPXssaw5)

Project material and report (30%): Your deliverables (report and codebase) described above will be evaluated by the CS210 team members. Code organization and the report materials will be the main components of the grading in this category.

Project presentation (50%): To use the time efficiently at the end of the semester, your project presentations will be evaluated based on the video recording provided. You will also have a

chance to access a random subset of videos and you will be ranking these projects as your feedback to us.

- **Grading by the lecturer**: Onur will be grading each project based on the criterias described in the project description.
- **Grading by the TAs**: Our TAs will also grade a random subset of projects and they will provide ranking among their assigned groups as well as scores between 1-10 for each evaluation criteria.
- **Grading by other teams**: Each student will receive a list of videos and they will provide a ranked list of projects based on their quality.
- **Grading by your team members for individual performance**: You will be also asked to evaluate your team members based on their contribution to the overall project.

Onur will aggregate all the information gathered from feedback, conduct a data analysis, and turn this information into a project grade for each team member.