Project for the Course OSUPR

Project Registration

To complete the OSUPR course, a student must undertake a project involving knowledge of data mining and machine learning. The project can be done individually or in pairs. Students can choose from three types of projects:

1. **Use of data mining and machine learning algorithms to solve a desired problem:** In this project, the student selects a desired data set from Kaggle (www.kaggle.com). The student's task is to solve the chosen problem.
2. **Implementation of their own data mining or machine learning algorithm:** In this project, the student implements a selected algorithm in a chosen programming language.
3. **Development of a "bot" and participation in the "Battle Spaciale" competition:** In this project, the student participates in a competition accessible through the website (tekmovanje.famnit.upr.si).
4. **Other:** If a student has their own idea, which the assistant deems to meet the project requirements, they can propose their idea.

When a student selects a project, they must have the idea approved by assistant Domen Vake. For approval, the student sends a "project proposal" to the assistant. The proposal is a PDF document containing the following information:

- Student(s) involved in the project
- A clear description of the chosen project
- Proposed approaches (which algorithms/approaches/technologies will be used)
- Expected results/goals
- Clear division of work if 2 students are collaborating on the project

The proposal should not be longer than 1 page. Proposals should be sent via email to domen.vake@famnit.upr.si. After reviewing the proposal, the assistant may accept it or reject it and suggest corrections.

The student's task is to have the proposal accepted by the end of the winter exam period of 2024. It is recommended to submit the proposal by the end of the semester at the latest.

Project Development

Once the student has an accepted proposal, they have until the end of the year (exact date to be determined later) to develop and defend the project. The final project must be submitted to the course's e-classroom. For project 3 (Battle Spaciale), the dates are limited to the duration of the competition. The date of the project defense is determined by the assistant after receiving the completed project. If the assistant deems that a defense is not necessary, this step may be skipped.

The final project includes a report and access to all digital resources. The report should cover all steps of the algorithm/model development. The development process should be evident, not just the final form of the model/algorithm. The development of all the software code in the project should also be apparent. Students must use GitHub (github.com) or GitLab (gitlab.com) for code development. If a student wishes to use something else, it must be approved by the assistant during the project registration phase. If external sources were used in development, they must be cited and clearly accessible. If the development of the code is not apparent, the project will be rejected. In the case of plagiarism, a proposal will be submitted to the Disciplinary Commission of UP FAMNIT against the student(s).