MAI391 – COMPUTER PROJECT

Deadline: 23h50', 19/07/2024

In this project, you are required to work in a group and complete the given tasks. The goal is to choose a topic that interests you, define a relevant problem, and then choose and implement an appropriate algorithm in Python. Additionally, you will process and simulate data, and assess the algorithm's performance. Specifically, you can proceed the following suggestions:

1. **Choose a Topic**: Select a topic that interests your group.
2. **State Your Problem**: Clearly define the specific problem you aim to solve within the chosen topic.
3. **Determine Suitable Secondary Data**
4. **Data Processing**:
   - Clean and pre-process the data to ensure it is ready for analysis.
   - Apply any necessary data transformations, including encryption if applicable.
5. **Simulate Data**: Create simulation data (if necessary) to better understand your data.
6. **Choose an Appropriate Algorithm**:
   - Research and select a suitable algorithm to solve the problem.
   - Implement the chosen algorithm in Python.
7. **Evaluate the Algorithm**:
   - Test the algorithm with your processed data.
   - Evaluate its performance based on training error, testing error, runtime, ...

Submission: Each submission must consists of

- Your Python source codes.
- A detailed report documenting each step of the project.
- A presentation summarizing your project findings and results.