Data Analytics Project Description – 2023

IS Department

Project Description:

- Use the methods and techniques studied in lecture and lab in order to apply the Data Analytics project cycle on your selected dataset you like.
- The total marks of the project will be evaluated according to:
 - (i) the project delivery and (ii) individual oral discussion.
- Project delivery date & discussion will be on the Practical exam date.

The project implementation will include the following:

- 1. Search for a real dataset with multiple attributes (a min of 10 relevant attributes and min 1000 rows)
- 2. Describe the dataset attributes
- 3. Understand the topic of the dataset and scientifically define your project objectives
- 4. Apply data cleaning or transformation methods (if needed)
- 5. Apply anomaly detection technique to find outliers (if needed)
- 6. Apply Data Exploration methods (i.e. Summary statistics and visualization methods)
- 7. Apply different data visualization charts, select the appropriate chart that allow you to observe more knowledge about your dataset (min 4 different types)
- 8. Mention your observations on your visualizations
- 9. The dataset preparation in terms of machine learning (training set, learning set)
- 10. Apply predictive analytic techniques (min 2 types)

Project Deliverables

- 1. Dataset (.CSV file)
- 2. Code files (Python file)
- 3. PPT presentation including short description of your data preprocessing, exploration, visualization, analytics, observations with screenshots for each.