**IT ELECTIVE 2**

**FINAL PROJECT**

**Data Mining**

**Data mining** is the practice of finding hidden patterns in data gathered from users or data that is important to the company’s operations. This is subjected to several data-wrangling procedures. Businesses are searching for creative ways to collect this enormous amount of data to provide useful company data. It has emerged as one of the most important methods for innovation. Data mining projects might be the ideal place to start if you want to work in this area of present science.

**Objective:** To develop a project proposal that applies data mining techniques to solve a real-world problem or explore a specific dataset.

**Programming Needed:**

* Access to datasets (publicly available or provided by the instructor)
* Computers with data mining software (e.g., Python with libraries like scikit-learn, R, Weka or any programming language)

**INSTRUCTIONS:**

1. Each group need to explore the datasets, understand their features, and brainstorm potential project ideas based on the dataset’s characteristics. Each group must be different datasets from other group.

2. Each group will gather from users or data that is important to the company’s operations.

3. Each group will brainstorm the project ideas that leverage data mining techniques to address specific problems or questions.

4. Encourage creativity and innovation in proposing projects that utilize the specific algorithm as follows:

1. Clustering
2. Association rule mining
3. Regression
4. Naïve Bayesian
5. Apriori Algorithm
6. Support Vector Machine (SVM) or other data mining techniques and
7. Rule-based Algorithm

5. Each group will simulate the program and show the datasets, training sets and the results.

6. Project Presentation: (10 minutes per group)

7. Presentation: Date: 13 July 2024 (face-to-face)

8. Check the final documentation in the Google Classroom.