**Instructions[[1]](#footnote-1):**

* The required tasks should be documented in a report using MS-Word.
* The project report should include your answers to the required tasks.
* A soft copy of the **PowerPoint Presentation** must be submitted to the Moodle Website.
* The soft copy of the **Report Word** should be uploaded to the Turnitin Moodle Website.

**Each group of students should follow and achieve the following tasks:**

The goal is to analyze and design a business scenario corresponding to an example of a real-life firm using object-oriented systems analysis and design modeling language such as UML. The required diagrams should be achieved using Visio software. For this purpose, you are asked to complete the following tasks.

**Note:** students are not allowed to use any example / case study from the class or lab exercises already done, but they should suggest another different business scenario with different modeling.

### Task 1: (05 marks)

After choosing a real-life company, write a narrative description of a scenario summarizing the business process useful for designing its information system.

**Task 2: (07 marks)**

Create the UML Data Flow Diagram (DFD) corresponding to the business scenario described in Task 1. The DFD graphically characterized data process and flows in a business system. The DFD should include a set of Entities, Data Flows, Processes and Data Stores.

**Task 3:** **(10 marks: 07 + 03)**

Create the UML Use Cases Diagram and Description corresponding to the business scenario described in Task 1. The use case is a view of the system requirements. The proposed use cases diagram should include a set of Actors and Behavioral relationships such as:

* *Communicates:* Used to connect an actor to a use case.
* *Includes:* Describes the situation in which a use case contains behavior that is common to more than one use case.
* *Extends:* Describes the situation in which one use case possesses the behavior that allows the new case to handle a variation or exception from the basic use case.
* *Generalizes:* Implies that one thing is more typical than the other thing.

### Task 4: Project Report

### Edit your project report including at least 7 pages. The latter should contain:

### The project cover page;

### Table of contents;

### Introduction;

* Detail of all project tasks;
* Conclusion and future work;

### Bibliography and Netography.

The assessment of your project report will be based on the following criteria:

### Quality of analysis.

### Accuracy of concepts/theories used.

### General organization of the project.

### Variety of references.

### Spelling and grammar.

1. [↑](#footnote-ref-1)