**DOCUMENTATION**

**ASSIGNMENT *1***

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1. **Assignment Objective**
2. ***Main Objective***:
3. ***Sub-objectives:***
4. **Problem Analysis, Modeling, Scenarios, Use Cases**
5. ***Functional requirements***
6. ***Non-functional requirements:***
7. ***Use cases:***
8. **Design**

Class Diagram:

The application is divided into several packages, each containing related classes. These packages include org.example.application, org.example.GUI, org.example.logic, and org.example.models. Each package contains classes responsible for specific functionalities, such as the main application logic (Operations), GUI components (UserInterface), and polynomial representation (Polynomial).

A diagram of a logic

Description automatically generated

1. **Implementation**
2. **Results**

1. **Conclusions**

This project was a great way to remember what I learned about OOP in my first semester and pick up some new stuff too. At first, it was a bit tough, but I found it helpful. I have learned to design the graphical user interface by code, using Java Swing, which was a little bit harder because last semester I used SceneBuilder and JavaFX.

* ***Future developments***:

1. **Bibliography**
2. *What are Java classes? -* [*www.tutorialspoint.com*](http://www.tutorialspoint.com)
3. *Object-Oriented Programming - Lecture Slides of prof. Marius Joldoș*
4. *Programming Techniques - Lectures of prof. Cristina Pop*
5. *app.smartdraw.com – for UML package and class diagrams*
6. *app.creately.com – for the use case diagram*
7. [*www.stackoverflow.com*](http://www.stackoverflow.com)