Object Oriented Modeling and Programming in Engineering

Homework 1

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1. From an oscillating energy system, you've got the equation for the power:

Whereat:

For this system you want to calculate the energy consumption E(t) for t=20 seconds.

1. UML Diagram

The UML diagram presented in the Figure 1 is used to show and explain the class ***MainClass\_Homework1*** and the methods used to calculate and graph the area of the function using 3 different numerical methods and the analytical function, the class. The C# is called MainClass\_Homework1.

The UML diagram presented in the Figure 2 is used to show and explain the class ***TestFunction***, this class is used to test the class ***MainClass\_Homework1***

A screenshot of a computer program

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Figure 1 UML MainClass\_Homework1

A screenshot of a computer

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Figure 2 UML TestFunction

1. Nassi – Schneiderman Diagrams