Week #8

Open Ended Lab

Objective

The objective of this lab session is to assess your understanding and application of Object-Oriented Programming (OOP) concepts, problem-solving skills, and coding techniques. You will be evaluated based on your ability to design and implement a system using OOP principles within the session.

Introduction

In this lab session, you will be presented with a general problem that you need to solve. Your solution will be assessed based on the following criteria: technique, problem-solving skills, OOP concepts, code efficiency, and code readability. Ensure that you apply the knowledge and skills covered in previous labs to complete the task effectively.

Problem Statement

You will need to design and implement a system using OOP principles.

Each criterion will be scored as follows:

- **0**: The criterion is not met.
- 1: The criterion is met.

Please review your previous lab notes and understand the key concepts of OOP, including class design, inheritance, encapsulation, and polymorphism, before attempting this assessment.



NED University of Engineering & Technology Department of Software Engineering Object Oriented Concepts and Programming

OEL ASSESSMENT		
SKILL SETS	ILL SETS EXTENT OF ACHIEVEMENT	
CRITERIA	0	1
Technique Applies programming techniques and methodologies.	Fails to apply programming techniques and methodologies.	Correctly applies programming techniques and methodologies.
Problem-Solving Skills Solves the given problem using appropriate logic and methods.	Fails to solve the given problem using appropriate logic and methods.	Effectively solves the given problem using appropriate logic and methods.
OOP Concepts Demonstrates understanding of OOP concepts (e.g., inheritance, encapsulation, and polymorphism).	Fails to Demonstrate a solid understanding of OOP concepts (e.g., inheritance, encapsulation, and polymorphism).	Demonstrates a solid understanding of OOP concepts (e.g., inheritance, encapsulation, and polymorphism).
Code Efficiency Writes optimized code.	Fails to write efficient and optimized code.	Writes efficient and optimized code.
Code Readability Ensures the code is well-organized and easy to read and understand.	Fails to Ensure that the code is well-organized and easy to read and understand.	Ensures the code is well-organized and easy to read and understand.

Weighted CLO (Psychomotor Score)	
Remarks	
Instructor's Signature with Date:	