

Individual Assignment: Build a Small System Using Classes and Objects (10%)

CSC122: Introduction to Programming Lab

To practice **Object-Oriented Programming (OOP)** concepts by designing and implementing a small system using **classes and objects** in Java.

Instructions:

1. **Design a small system** (e.g., Library Management, Student Registration, Inventory Tracker, To-Do List, etc.) using **OOP principles**.
2. Your system should include:
 - At least **2-3 classes**
 - Attributes (properties) and methods (functions) for each class
 - **Object instantiation** and interaction between objects
3. Include proper code organization, comments, and meaningful naming.
4. Create a **UML class diagram** to represent your class design.
5. Submit your work in a Class & Object Assignment.

Evaluation Rubric (2.5 pts each):

1. Functionality: System runs without errors and performs the intended tasks
2. UML diagram: Clear, accurate representation of class relationships and structure
3. Creativity and Completeness: Thoughtful design and effort in implementation
4. Presentation: Clear and fluent and shows a working demo of the system with key features highlighted