

Assignment 1: Designing a System with OOP

Deadline: 23:59 pm, April 16, 2024

Now, you are designing a system with the Object Oriented Programming (OOP) paradigm. The system can be used in any concrete scenario, like Course Management System, Student Management System, Library Management System, etc.

For example, for designing a Course Management System, you can decide the entities (i.e., classes) and functionalities (i.e., methods) in such a system. Possible functionalities include *course registration*, *course search*, *grade analysis*, etc. You should design at least 6 classes (like *student*, *teacher*, *admin*, *lecture course*, etc.) and leverage the features of OOP.

You are free to select other “XXX” Systems and design at least 6 reasonable classes. And you don’t have to write the code to implement the management system.

To complete this task, you should provide a document (less than 4 pages) describing your system design and related functions. More importantly, you **MUST** insert a UML class diagram to show the relationships among the classes in your system. You can use the Violet UML Editor, diagrams.net, or other UML tools.

What you need to submit: Submit a document file in PDF and name it with your ID and name, e.g., “123456-Harry-asgl.pdf”.

Submission guideline: You should submit the files via email to our TA **Mr. Mai Sun** (mai.sun@mail.nwpu.edu.cn) before the deadline.