



FCS CYCLE 58

Assignment 5

Due Date: 2 November, 12 AM

In this assignment, you will be tasked with writing a Python program that utilizes Object-Oriented Programming (OOP) principles. You will create a course enrollment system for a university where students can enroll in courses, drop courses, and manage their course catalog. The system will involve the following classes and functionalities, and you will implement a menu-driven interface for user interaction.

1. **Add Course:** Add a new course to the catalog.
 2. **Enroll Student in Course:** Enroll a student in a specified course.
 3. **Drop Course for Student:** Drop a specified course for a student.
 4. **List Student Courses:** Display all courses a student is enrolled in.
 5. **Save Course Catalog:** Save the current course catalog to a file.
 6. **Load Course Catalog:** Load the course catalog from a file.
 7. **Exit:** Exit the program.
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A course has a code, a name and a number of credit hours. It can either be a core course or an elective course. A student has an ID, a name, and a dictionary to store their enrolled courses. They can enroll in a specific course. If they are already enrolled in the course, an exception is raised. They can drop from a course by providing its code. If the course is not found in their enrollment, an exception is raised. The system manages the student enrollment using a list of all students, and the course catalog using a dictionary of all courses.

Submission Steps:

1. Name your python file which includes your submission similar to the following
assignment_05_Name_LastName
2. Push your file to the remote repository foundation-cs-python on GitHub
3. Finally open the assignment on GitHub and submit the link.
4. If you have any inquiry about the assignment or if there is something not clear about the steps feel free to contact me through **slack** or by **email**

Important Reminder !

The assignment should be the GitHub link, no files or replit links will be accepted for the submission and you will be treated as if you did not do the assignment

You cannot do well on the exams unless you do the assignment

YOURSELF! Do not Google the solution or chatgpt it.

This will not help you! It is your decision in the end, your responsibility.

You are allowed to lookup methods in python that might help you in your solution.