At the ACME school they need help with the management of their courses and students.

They have requested a program capable of performing the following tasks:

- Register a student by specifying their name and age (only adults can register).
- Register a course with a name, registration fee, start date, and end date.
- Allow a student to enroll in a course after paying the registration fee, if applicable, through a payment gateway.
- Provide a list of courses and their enrolled students within a specified date range.

They are looking for a straightforward solution for now, so they have asked for a C# implementation with a class library that includes production code and a test project using xUnit.net (the tests should run without requiring any manual intervention or prior configuration).

For now, they do not want any dependencies on a Web API, database, or payment gateway.

However, If the PoC convinces them, later they will want to publish it as an API and persist the information in a DB (we don't know what type yet). Therefore, it is important to create the appropriate abstractions and to leave the code in a state that allows for future enhancements if necessary.

For the evaluation, the following will be considered:

- Clean code, easy to read and maintain.
- Create a rich domain model (although we know that currently, the program does not seem to do much)
- Create the required abstractions to be able to make decisions later without requiring a complete rewrite of the code (this includes potential external services such as the payment gateway, database, etc).
- Create as many tests as necessary to show the correctness of the program and serve as a self-explanation of what the program does.
- Use, when necessary, test doubles to guide test execution.
- A mandatory README.md file explaining (in English or Spanish) the why of things and any other considerations you consider appropriate.

      - What things would you have liked to do but didn't do?
      - What things did you do but you think could be improved or would be necessary to return to them if the project goes ahead.
      - What third-party libraries have you used and why.
      - How much time you have invested in doing the project and what things you have had to research and what things were new to you.

Thank you!!!!