

SCHOOL

Problem Description

You are to model a department using an object-oriented programming (OOP) paradigm. A basic school is made up of the following.

- Staffs
 - Principal
 - Teachers
 - Non-Academic Staffs
- Students
- Courses
- Classes
- Applicants

Each of these players have various functions/actions which they can perform

- A teacher can teach a course.
- A student can take a course.
- The principal can expel a student etc.
- A principal can admit applicants based on age.

How will I complete this project?

1. Organise the folders for your module (application), to house both your code base and the tests.
2. Write tests to cover all the methods to be written, before development begins (TDD: Test Driven Development).
3. Make logical assumptions where necessary.

Steps to evaluate.

4. Code

- a. At Minimum
 - i. The right visibility modifiers should be used.
 - ii. The following concepts/constructs should be used as much as possible
 - Encapsulation
 - Inheritance
 - Polymorphism
 - Interfaces/Abstract classes
 - Single Responsibility for classes.
 - Abstraction
 - Aggregation
 - Composition
- 5. Test Coverage (~80%)
 - b. At Minimum
 - iii. The tests should cover the methods as well as the conditions/procedures that the methods employed.