

Week 4: Backend Assignment

Assessment

WEEK 4 BACKEND ASSIGNMENT

TASK SCHOOL MODEL

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

- · Principal
- · Teachers
- · Staff
- · Non-Academic Staff
- · Students
- · Courses
- · Classes
- $\cdot \, \mathsf{Applicants} \,$

Each of these players has 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.
- · A principal can admit applicants based on age.

How will I complete this project?

1. Organize the folders for your module (application)



- 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