

CL309 – Object Oriented Analysis & Design Lab

Task#06

Online Testing Service

Requirements

Consider an online testing service. The application has a lists of tests that registered users can attempt. Non registered users can access the online application and view the tests they can take. In order for a user to attempt a test they have to register themselves and then apply for the test. A user is only allowed to take one test on a single day. The application keeps track of the marks obtained by a user after the test is complete. There is an administrator who adds/removes tests and their respective questions.

Add at least 5 tests in your application with each test having at least 10 questions. So that the user can attempt the tests and their marks can be calculated. No need for a database you can keep the questions in files.

Study the information given above the do the following:

1. Identify the classes, attributes and methods that are required for the said implementation. Define the methods so that the implementation is complete rather than partial. Use abstract classes, interfaces and abstract methods where needed.
2. Declare classes to interact with the classes identified in i (first step). So that the user can effectively use it to enter and/or view necessary information (**MVC**).
3. Write class and member level comments for each class identified in i (first step), so that javadocs can be generated form the code when needed.
4. Write a custom exception, the exception is thrown when a registered user tries to apply for two tests that are on the same day.