Pgr112-OOP-exam-2022

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What is Object-oriented Programming?

It's a concept where you use objects instead of functions.

The objects contain the data that is used and is handled through setting data Through the object and getting data from it. It's efficient for re-using code since you can reuse the objects or create new ones with new data.

What concepts did you use in your solution?

I have used Polymorphism in the Data Access Object classes when connecting to the Database,

They override the Create and MapToResult classes from their parent class.

They also share the same connection details and therefor can access that method through the parent class.

I have used Encapsulation several of the classes in my project, by setting the fields to private and accessing them through getters and setters.

I have used Inheritance when creating the Quiz classes and the DAO classes, they have parent classes with methods and fields that they can access through their parent because. Abstraction is used in both User classes and Quiz classes with methods that get data that is hidden from the user.

I have also used some down-casting when adding quizzes to the database, because they initially are added as parent class objects they are downcasted to their respective subclasses to be able to add them to their own database tables.

What is JDBC and how did you use it?

I used it by creating Data Access Objects that handle the methods that connect to the Database to retrieve information that is stored by the user.

The Dao-objects in this project cannot delete objects since I did not find that necessary. The Abstract QuizDao has a method with the information needed to connect to mySql. I have used Maven to add the mySql connector to be able to connect to mySql.