



FUNDAMENTAL JAVA PROJECT : QUIZ MANAGER

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TECHNICAL GUIDE

PROJECT STRUCTURE:

ROOT/SRC:

Directory fr.epita.quiz

It contains Three packages inside it which are used for various purposes.

1.datamodel

2.launcher

3.services

1.datamodel package

This is a preliminary package which contains all the classes which are going to be used later in the service and launcher classes.

Available Classes:

- MCQQuestion

It contains various variable declaration statement, constructors and getter setter for performing operations [CRUD] to a MCQ Question.

```
private String qId;  
private String qText;  
private String qTopic;  
private String qDifficulty;  
private String qCorrectAnswer;  
private String qWrongAnswer1;  
private String qWrongAnswer2;  
private String qWrongAnswer3;
```

- MCQQuiz

It extends the class MCQQuestion and also contains an ArrayList options which is used to get the options of the MCQ while operating on quiz.

```
private ArrayList<Options> options;
```

- OpenQuestion

It contains various variable declaration statement, constructors and getter setter for performing operations [CRUD] to a Open Question.

```
private String qId;
private String qText;
private String qTopic;
private String qDifficulty;
private String qTip;
private String qCorrectAnswer;
```

- OpenQuiz

It extends the class OpenQuestion and used while operating on quiz.

- Options

This class extends the MCQQuestion Class. It has isCorrect Boolean which is used to allocate True or False to the Options in MCQQuiz

```
Boolean isCorrect=null;
```

- Student

It is the class for student and contains details and parameters of student.

```
private String name;
private String id;
private String password;
```

2.launcher package

The Launcher package is the host for main class. Which is the driver for all available services in the project. It calls every service available.

It has a main method which has multiple switch cases for Displaying menu and getting user responses.

3.services package

This package homes the available services of the project.

Available Classes:

1.CreateQuiz

It has four major methods inside it for various purposes.

METHOD	USE
createOpenQuiz	This is used to create a Open Quiz based on Topic
createMCQQuiz	This is used to create a MCQ Quiz based on Topic
createMCQQuiz_difficult	This is used to create a Open Quiz based on Difficulty

createOpenQuiz_difficult	This is used to create a Open Quiz based on Difficulty
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2.ExportStudentResult

It has four major methods inside it for various purposes. All serve the main purpose of exporting quiz attended by Student.

METHOD	USE
extractOpen	This is used to extract a Open Quiz based on Topic
extractMCQ	This is used to extract a MCQ Quiz based on Topic
extractOpenD	This is used to extract a Open Quiz based on Difficulty
extractMCQD	This is used to extract a MCQ Quiz based on Difficulty

3.MCQQuestionDAO

This method is a CRUD Driver method. It has Create, Read, Update, Delete method for MCQ Question.

4.OpenQuestionDAO

This method is a CRUD Driver method. It has Create, Read, Update, Delete method for Open Question.

5.StudentDAO

This method is a CRUD Driver method. It has Create, Read, Update, Delete method for a student.

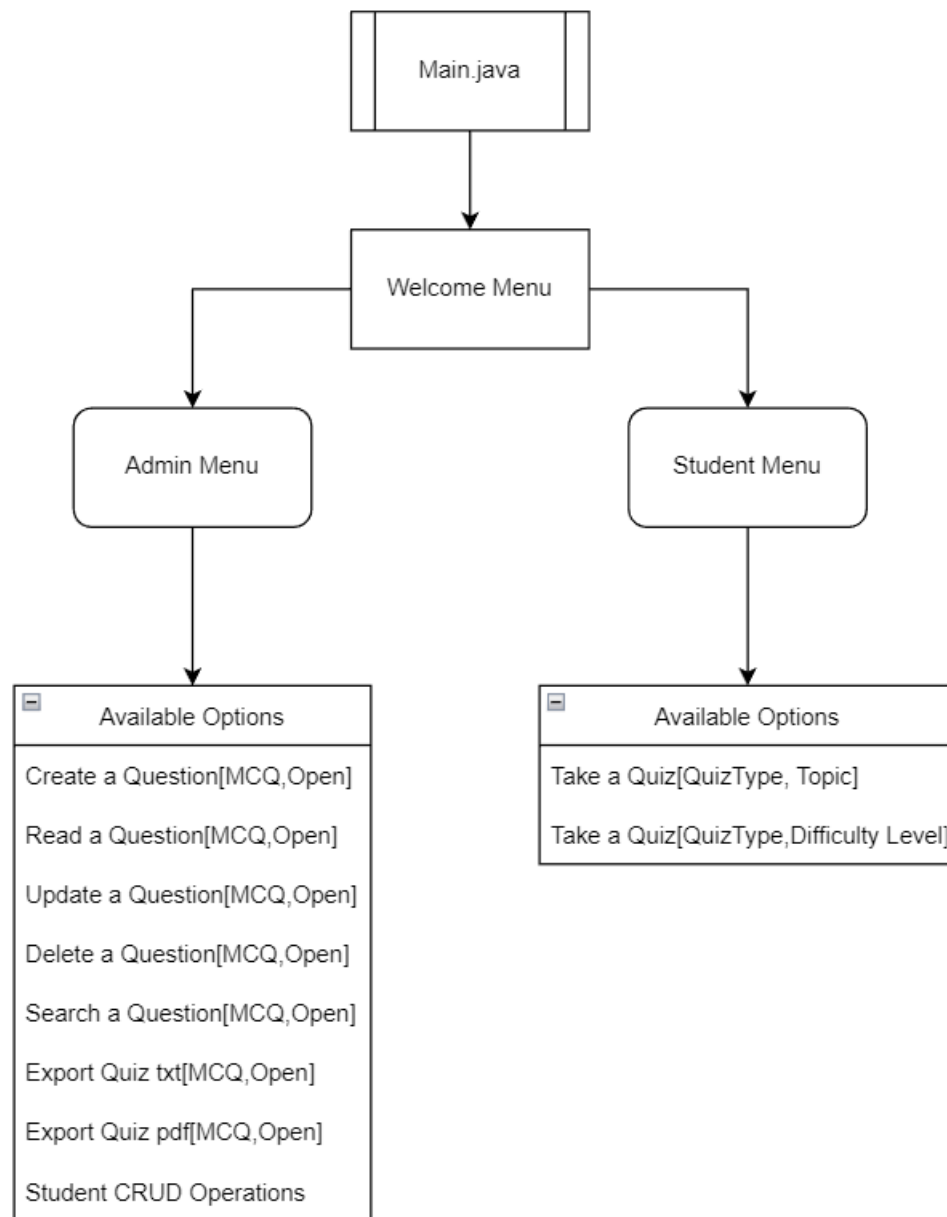
6.StudentLogin

This service class is a Login Driver which is used to authenticate student by getting Credentials and verifying it in the DB.

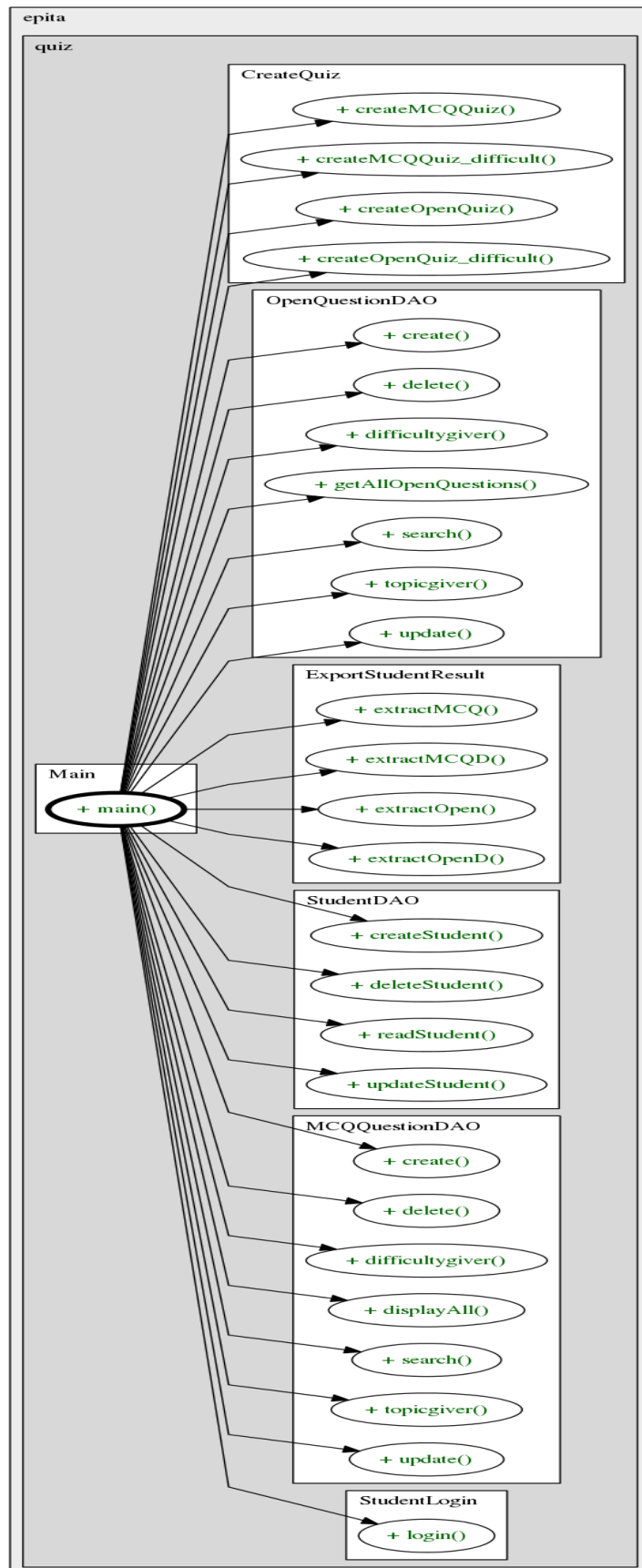
Test Package:

It contains a few test classes for the service classes available in-service package.

OVERALL FLOWCHART



PROJECT CALL DIAGRAM REPRESENTATION



WORKING SEQUENCE DIAGRAM:

The working Sequence File is in Project Folder named Working Sequence

Please have a look.