TECHNICAL SPECIFICATION

By

ABUBAKAR MUHAMMED MUKTAR

As part of the

Java/OOP/UML course.

August 12, 2022.

1. Introduction

1.1. Project Background

This project is a console application for managing digital quizzes - preparation and execution. It is part of the Java/OOP/UML course.

1.2. Project Overview

In this project, user can login as a student, take a test and get their grades at the end of the quiz. In addition, user can login as a teacher, create questions and quizzes.
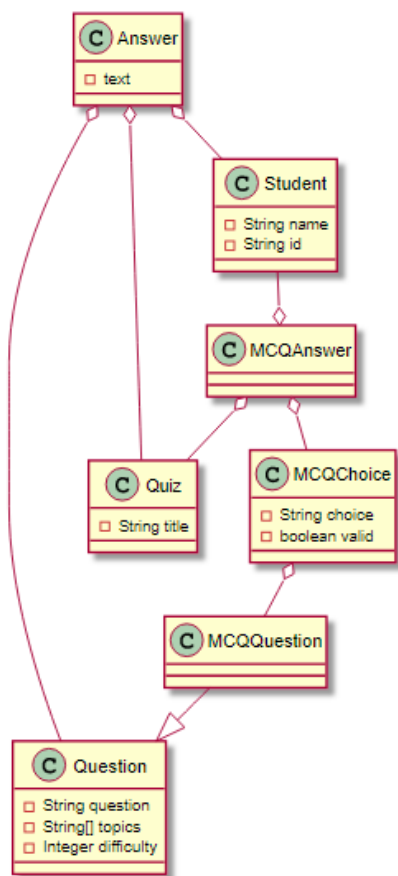
1.3. Project Scope

In Scope :

- Automatically assembles open question and multiple-choice

  quizzes based on difficulty level

- Automatically assembles MCQ quiz based on topics
- Auto-grading for the quiz
- Exporting of quiz questions to text
- Add new questions
- Update questions
- Delete questions
- Export quizzes to plain text
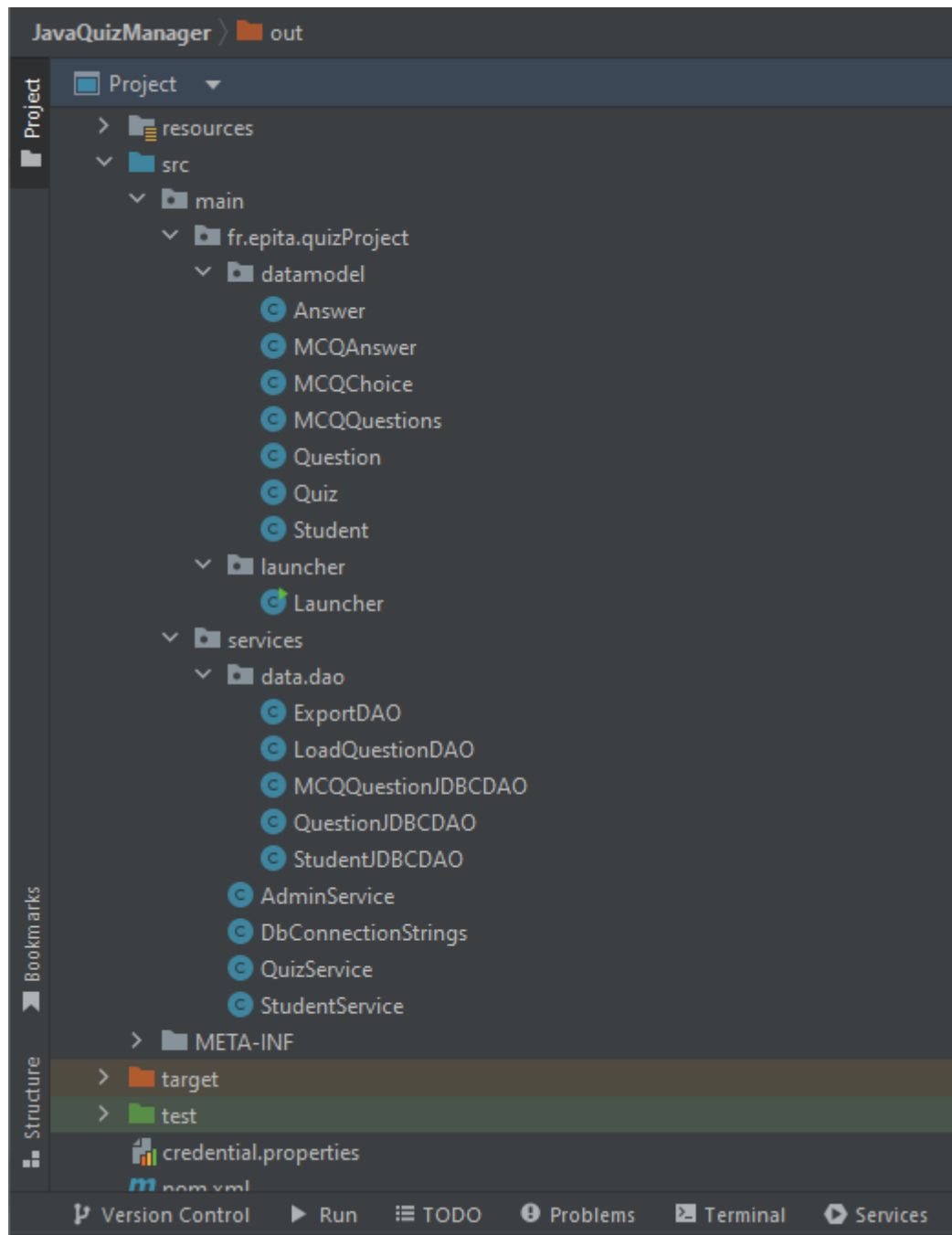- Export quiz as pdf

1.4. Project Dependencies

The project was developed and tested with Java 11 has a number of dependencies which includes:

- Posgres JDBC

- iText7

- iBatis JDBC

CLASS SPECIFICATION

JavaQuizManager > out

Project

> resources
> src
  > main
    > fr.epita.quizProject
      > datamodel
        © Answer
        © MCQAnswer
        © MCQChoice
        © MCQQuestions
        © Question
        © Quiz
        © Student
      > launcher
        © Launcher
    > services
      > data.dao
        © ExportDAO
        © LoadQuestionDAO
        © MCQQuestionJDBCDAO
        © QuestionJDBCDAO
        © StudentJDBCDAO
      © AdminService
      © DbConnectionStrings
      © QuizService
      © StudentService
  > META-INF
> target
> test
credential.properties
pom.xml

Version Control   Run   TODO   Problems   Terminal   Services

BUSINESS LOGIC

1	Assemble quiz based on difficulty level with 1: easy 2: intermediate: 3: hard and display evaluation score alongside corrections.
2	Assemble quiz based on topics as specified by the user and display evaluation score alongside corrections.
3	Create new questions both MCQ and open
4	Export quiz questions in text and pdf format
4	Update questions
5	Delete questions based on topic
7	Search questions based on topics
8	Create new student to take quiz