Contents

User Guide for EPITA Java Quiz Conceived and Developed by NGYIBI VADRAMA NDISANG.

Amin Codes To login as Admin 604, 605, 606

Existing Quiz Codes: Vadrama101, Vad102 and LastQuiz

I. Installation

You will need a to have PostgreSQL version 12.4-1, and Jdk version 1.8.0_31 install and classpath setup Appropriately.

I.1 Database Installation

II.1 Unzip the file using either WinRAR or any other software of your choice.

III.1 Open the "*Final_Java_Project/DataBase*" folder to get the exported PostgreSQL Database

IV.1 Create an empty database name "Epita_Java_Quiz" and import the database as shown in the screenshots below
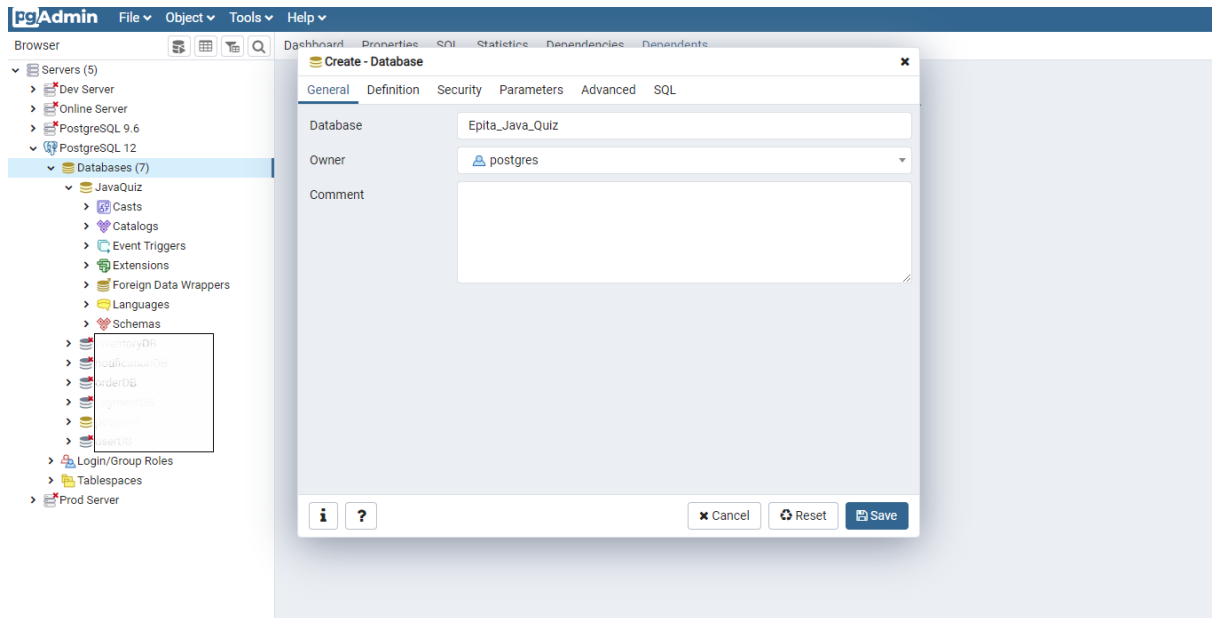
Create Database with the same specifications as shown
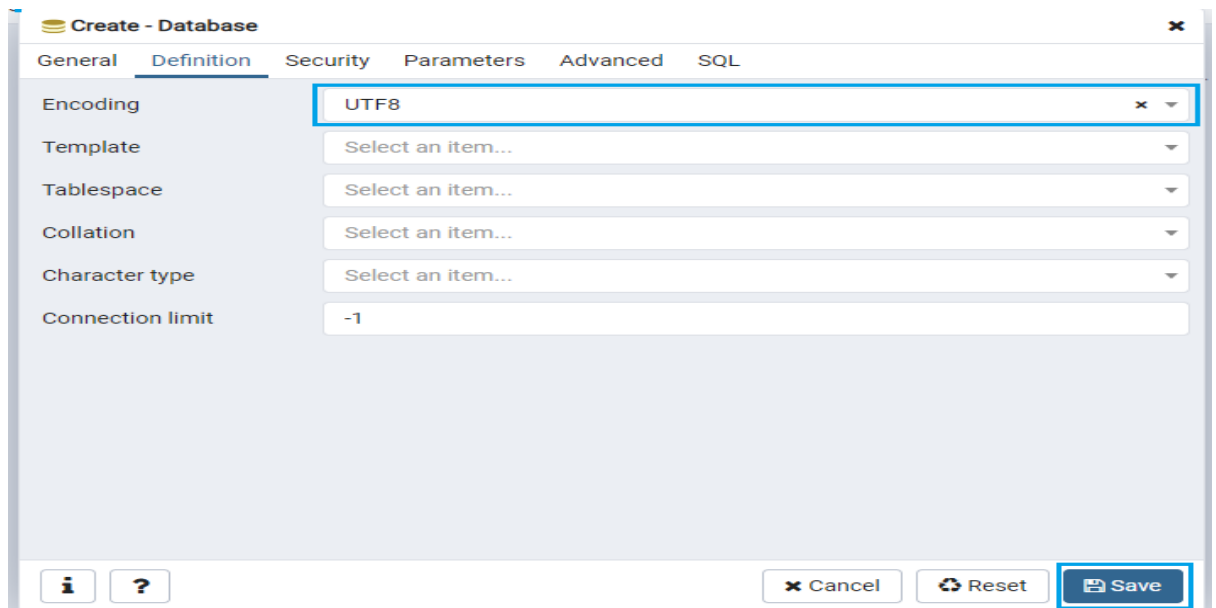
NB: use UTF-8 Encoding and set Role to postgres as seen in the screenshots
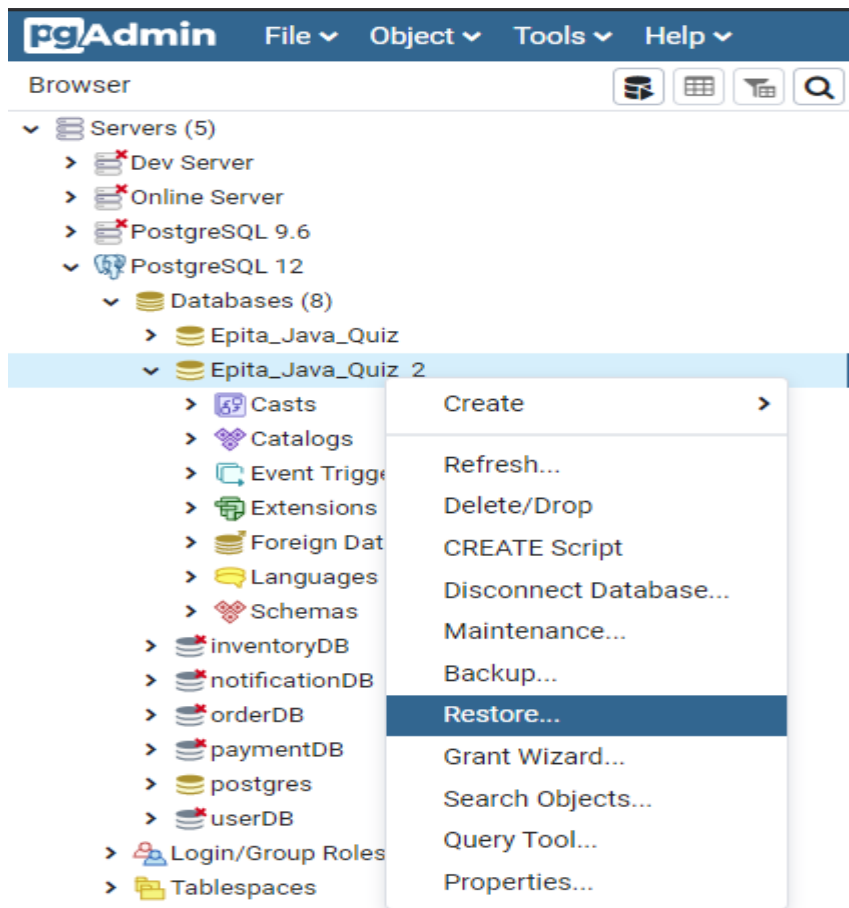
Click on restore and follow the in next image
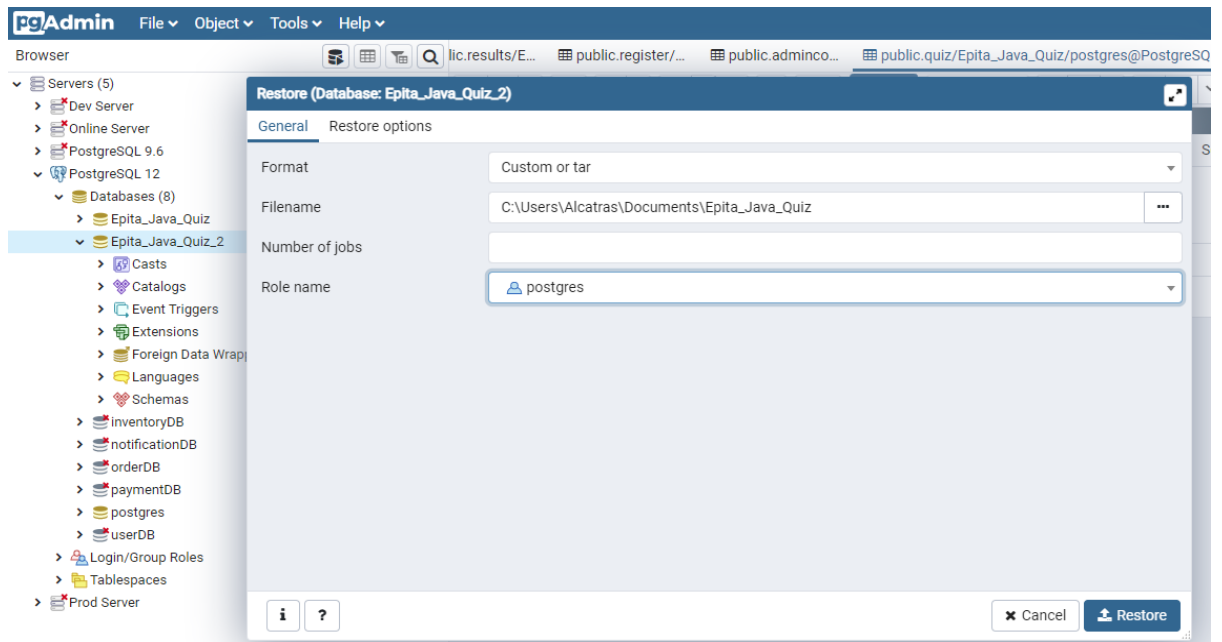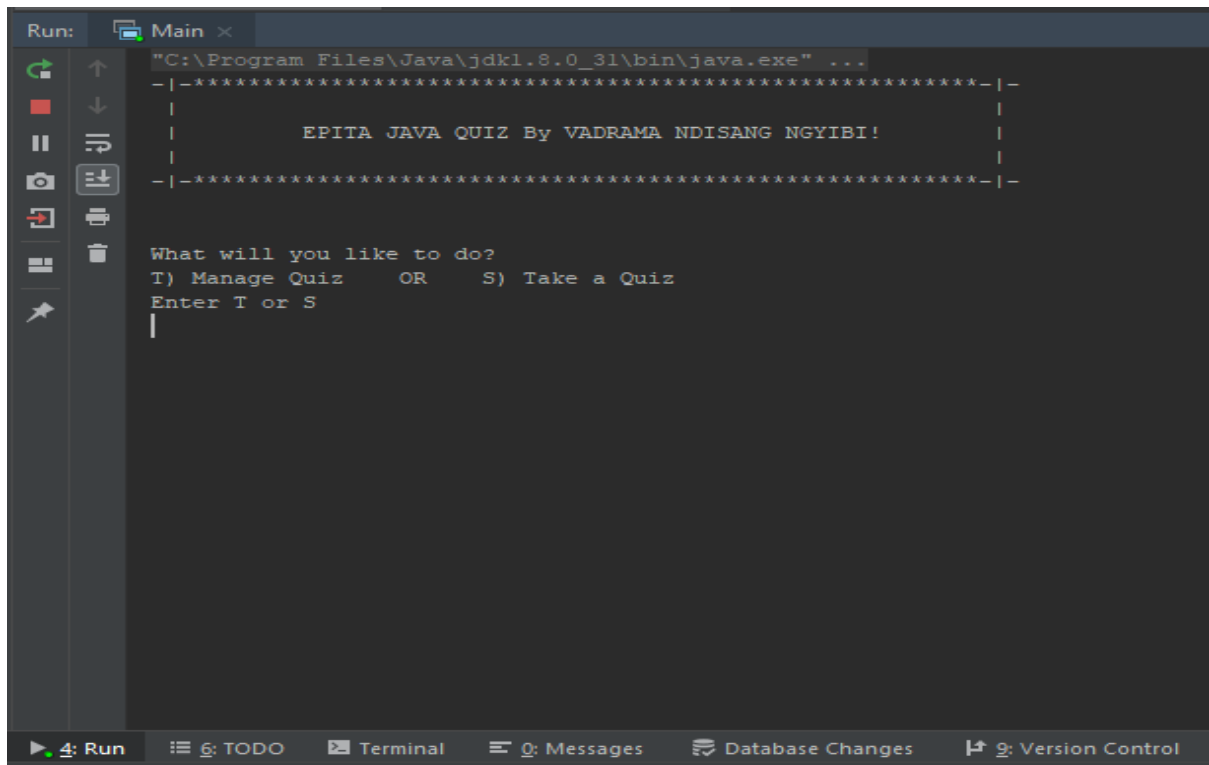
Navigate to the database file in "**Final_Java_Project/DataBase**" and select the file then click the restore button.
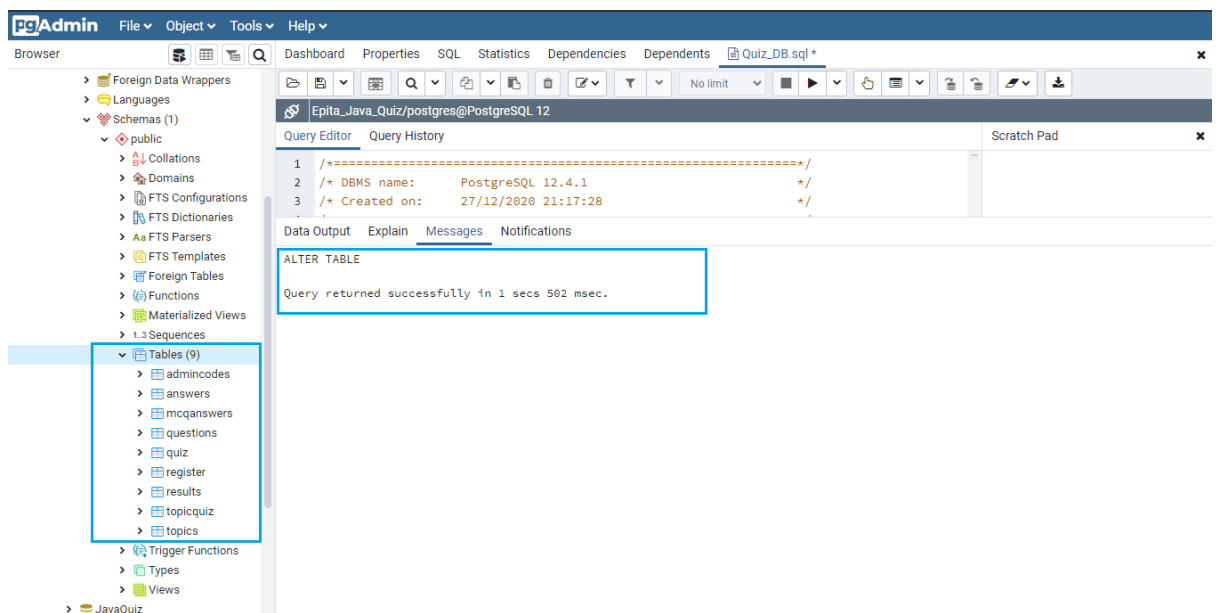
You should see all 9 tables of the Database restored.

I.2 Programme setup and running.

Open the project folder with your favourite IDE. From your IDE navigate to the folder "**Final_Java_Project\src\epita\fr\java\quiz\connection**" to change the existing password to your PostgreSQL server password and install the JDBC driver. Click on your IDE's Run button to run the Program. You should see the following display in your IDE's console.

```
Run:      Main ×
    "C:\Program Files\Java\jdk1.8.0_31\bin\java.exe" ...
    _|_*******************************************************_|_
         |                                                    |
         |          EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI! |
         |                                                    |
    _|_*******************************************************_|_


    What will you like to do?
    T) Manage Quiz      OR     S) Take a Quiz
    Enter T or S
    |
```

▶ 4: Run   ≔ 6: TODO   ⏚ Terminal   ≡ 0: Messages   🗃 Database Changes   ⇥ 9: Version Control

II.   Application Usage

II.1   Add Question

To Add a Question, follow the Instructions on the screen by first entering "**T**", followed by an Admin code of either (**604** or **605** or **606**). Once authenticated you will see the following screen.

Now Enter "**Q**" to manage Questions.

You should now see. A new set of instructions show up. Follow them till you arrive at the level to enter your question. Enter your question and wait for the next instructions.

```
What will you like to do?
T) Manage Quiz    OR    S) Take a Quiz
Enter T or S
t
Enter your Admin Code to confirm your Status
604
Authenticated
What will you like to do?
Q) To Manage Questions    OR    TP) To Manage Topics OR  QZ) To Manage Quiz
Enter Q or TP or QZ
q
Enter A) to Add Question or V) or Uq) to Update a Question to View all Questions or S) to search a for a Question based on topic
a
-|-################################################################-|-
 |   You can always Enter (M) to return to main menu or (E) to exit    |
-|-################################################################-|-


You can add new questions by first choosing the type of Question

Enter (MCQ) for MCQ questions or (O) for other Question types
mcq
Choose Question topic by entering:
( 1 ) for - Java  *NB* Status -> Active
( 2 ) for - Python  *NB* Status -> Active
( 3 ) for - HTML  *NB* Status -> Active
( 19 ) for - Vadrama  *NB* Status -> Active
( 20 ) for - C++  *NB* Status -> Active
20
Enter Question difficulty level between 1 to 3
2
Enter a Question:
Is Java A compiled or scriptin language?
```

```
Run:    Main ×
        ( 2 ) for - Python  *NB* Status -> Active
        ( 3 ) for - HTML  *NB* Status -> Active
        ( 19 ) for - Vadrama  *NB* Status -> Active
        ( 20 ) for - C++  *NB* Status -> Active
        20
        Enter Question difficulty level between 1 to 3
        2
        Enter a Question:
        Is Java A compiled or scriptin language?


        Enter the first possible answer
        No
        Enter the second possible answer
        Yes
        Enter the third possible answer
        Compiled
        Enter the fourth possible answer
        None of them

        Which is the correct answer?

        Enter
        A for - No
        OR
        B for - Yes
        OR
        C for - Compiled
        OR
        D for - None of them
        c
        The Question was added Successfully
        Do you wish to add another Question?
         Enter Y or N
        |
```
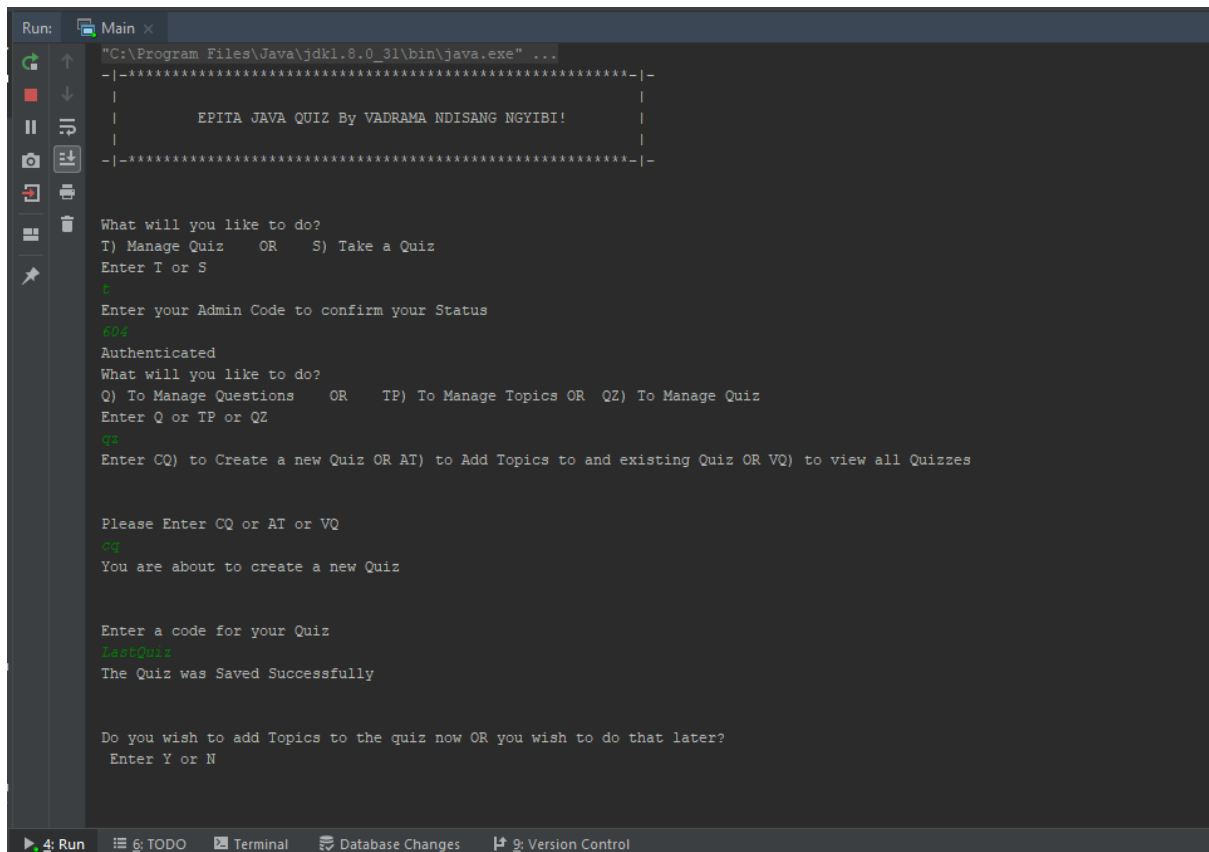
Enter the four possible answers and finally choose the right one.

Your Question Should be saved to the DB.

II.2   Add A Quiz
To add A quiz, Follow the screens Below.

```
"C:\Program Files\Java\jdk1.8.0_31\bin\java.exe" ...
-|-*************************************************-|-
|                                                   |
|       EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!   |
|                                                   |
-|-*************************************************-|-


What will you like to do?
T) Manage Quiz      OR    S) Take a Quiz
Enter T or S
t
Enter your Admin Code to confirm your Status
604
Authenticated
What will you like to do?
Q) To Manage Questions      OR     TP) To Manage Topics OR  QZ) To Manage Quiz
Enter Q or TP or QZ
qz
Enter CQ) to Create a new Quiz OR AT) to Add Topics to and existing Quiz OR VQ) to view all Quizzes


Please Enter CQ or AT or VQ
cq
You are about to create a new Quiz


Enter a code for your Quiz
LastQuiz
The Quiz was Saved Successfully


Do you wish to add Topics to the quiz now OR you wish to do that later?
 Enter Y or N
```

II.3   Add a Topic

To add a Topic, Follow the Screen below

```
Run:    Main ×
"C:\Program Files\Java\jdk1.8.0_31\bin\java.exe" ...
-|-***********************************************-|-
|                                                 |
|         EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!         |
|                                                 |
-|-***********************************************-|-

What will you like to do?
T) Manage Quiz     OR    S) Take a Quiz
Enter T or S
t
Enter your Admin Code to confirm your Status
604
Authenticated
What will you like to do?
Q) To Manage Questions     OR    TP) To Manage Topics OR    QZ) To Manage Quiz
Enter Q or TP or QZ
tp
Enter A) to Add a Topic or V) to View all Topics or Up) to Update a Topic or S) to search for a Topic
a
Enter a new Topic
C++
The topic was added Successfully

Do you wish to add another Topic?
 Enter Y or N
n
Exiting...


Invalid Entry

Process finished with exit code 1
```

```
Run:    Main ×
y
The System generates quiz questions based on the topics and difficulties for the desired questions you choose.

You will have to choose a topic, enter a difficulty for the questions you would like to be generated.

Choose a topic from the list
 Enter:
( 1 ) for - Java  *NB* Status -> Active
( 2 ) for - Python  *NB* Status -> Active
( 3 ) for - HTML  *NB* Status -> Active
( 19 ) for - Vadrama  *NB* Status -> Active
( 20 ) for - C++  *NB* Status -> Active
20
Enter a Question difficulty level between 1 to 3
2
The Question was added Successfully
Do you wish to add another Topic to your Quiz?
 Enter Y or N
y
The System generates quiz questions based on the topics and difficulties for the desired questions you choose.

You will have to choose a topic, enter a difficulty for the questions you would like to be generated.

Choose a topic from the list
 Enter:
( 1 ) for - Java  *NB* Status -> Active
( 2 ) for - Python  *NB* Status -> Active
( 3 ) for - HTML  *NB* Status -> Active
( 19 ) for - Vadrama  *NB* Status -> Active
( 20 ) for - C++  *NB* Status -> Active
20
Enter a Question difficulty level between 1 to 3
3
Your chosen Topic for this Quiz exists already
Do you wish to add another Topic to your Quiz?
 Enter Y or N
```

```
Run:   Main ×
      -|-************************************************************-|-
      |                                                            |
      |          EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!        |
      |                                                            |
      -|-************************************************************-|-


      What will you like to do?
      T) Manage Quiz     OR     S) Take a Quiz
      Enter T or S
      t
      Enter your Admin Code to confirm your Status
      604
      Authenticated
      What will you like to do?
      Q) To Manage Questions     OR     TP) To Manage Topics OR  QZ) To Manage Quiz
      Enter Q or TP or QZ
      qz
      Enter CQ) to Create a new Quiz OR AT) to Add Topics to and existing Quiz OR VQ) to view all Quizzes


      Please Enter CQ or AT or VQ
      vq
      1). Quiz Code : Vadrama101, -|- Status : Active
      2). Quiz Code : Vad102, -|- Status : Active
      3). Quiz Code : LastQuiz, -|- Status : Active
      -|-************************************************************-|-
      |                                                            |
      |          EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!        |
      |                                                            |
      -|-************************************************************-|-


      What will you like to do?
      T) Manage Quiz     OR     S) Take a Quiz
      Enter T or S

  ▶ 4: Run   ☰ 6: TODO   ⯈ Terminal   ⇄ Database Changes   �ഺ 9: Version Control
```

II.4   Take a Quiz

To take a Quiz, Follow the Screen below. First register as a student by entering "**S**" then enter your name, if it exists in the database, you will be redirected to the quiz portal if not you will be registered automatically by the system and then redirected to the quiz portal. Once at the Quiz portal enter the Quiz code and follow the instructions to answer.

You will have to answer one question at a time and the system will automatically call the next question and so on till you finish the quiz.

See the screen below.

```
-|-********************************************************-|-
      |                                                      |
      |          EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!      |
      |                                                      |
-|-********************************************************-|-


What will you like to do?
T) Manage Quiz    OR    S) Take a Quiz
Enter T or S
S
    -|-#####################################################################-|-
      |   You can always Enter (M) to return to main menu or (E) to exit      |
    -|-#####################################################################-|-


Enter your student Number to begin.
NGYIBI VADRAMA NDISANG
You are not yet registered.


Please wait!

Registering you...

You have been registered Successfully
Please enter the Quiz code you wish to take.
Vadrama101
Quiz Code : Vadrama101
Status : Active

Quiz Started.

For MCQ Question, enter only the letter corresponding to the right answer when prompt to do so.
For Ordinary questions, enter your answer only when prompt to do so.
```

```
 Tic Toc

 BEGIN



1). Which variables are created when an object is created with the use of the keyword 'new' and destroyed when the object is destroyed?

A). Local variables
B).  Instance variables
C). Class Variables
D). Static variables

Enter the later corresponding to the right answer
```

```
1). Which variables are created when an object is created with the use of the keyword 'new' and destroyed when the object is destroyed?

A). Local variables
B).  Instance variables
C). Class Variables
D). Static variables

Enter the later corresponding to the right answer
b

2). What is byte code in Java?

A). Code generated by a Java compiler
B). Code generated by a Java Virtual Machine
C). Name of Java source code file
D). Block of code written inside a class

Enter the later corresponding to the right answer
a
A). Java SE
B). Java EE
C). Java 2E
D). None of the above

Enter the later corresponding to the right answer
d

3). 'Who is known as father of Java Programming Language?

A). James Gosling
B). M. P Java
C). Charel Babbage
D). Blais Pascal

Enter the later corresponding to the right answer
```

```
10). Does Python make use of decorators?
Answer True or False

Enter your answer
True
Enter your answer
True

11). What is the output of this expression, 3*1**3?

Enter your answer
3

12). What is the answer to this expression, 22 % 3 is?

Enter your answer
1

13). Can we align a Block element by setting the left and right margins ? Answer Yes or No.

Enter your answer
No

14). Suppose we want to arragnge five nos. of DIVs so that DIV4 is placed above DIV1. Now, which css property will we use to control the order of stack?

Enter your answer
z-index

15). If we want define style for an unique element, then which css selector will we use ?

A). Id
B). text
C). class
D). name

Enter the later corresponding to the right answer
```

Once you finish the Quiz, the system automatically generates a text file wit the Quiz code and your name as quizcode__yourName.txt The text file contains all the questions you answered and the score you earned for the Quiz. This file can be found in the folder "*Final_Java_Project\Quizzes*"

```
Enter your answer
No

14). Suppose we want to arragnge five nos. of DIVs so that DIV4 is placed above DIV1. Now, which css property will we use to control the order of stack?

Enter your answer
z-index

15). If we want define style for an unique element, then which css selector will we use ?

A). Id
B). text
C). class
D). name

Enter the later corresponding to the right answer
a


Your score: 13

Your Score for this quiz has been saved Successfully!

Quiz End

Returning to main Menu
_|_******************************************************_|_
|                                                        |
|          EPITA JAVA QUIZ By VADRAMA NDISANG NGYIBI!     |
|                                                        |
_|_******************************************************_|_


What will you like to do?
T) Manage Quiz    OR    S) Take a Quiz
Enter T or S
```

Final_Java_Project [E:\My Stuff\Documents\EPITA\Fundamental Period DSA [FP]\OOP - JAVA UML\Final_Java_Project] - ...\src\epita\fr\java\quiz\DAOs\TakeQuiz.java [Final_Java_Project] - IntelliJ IDEA

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Final_Java_Project Quizzes   Main Git:

Project:
```
Final_Java_Project E:\My Stuff\Documents\EPITA\Fundamer
  .idea
  Java_Quiz_Conception_Files
  New folder
  out
  Quizzes
      Vadrama101_ngyibi.txt
  src
      epita.fr.java.quiz
      Main
  Tecnical_Docs
  .gitignore
  Final_Java_Project.iml
  LICENSE
  External Libraries
  Scratches and Consoles
```

TakeQuiz.java × | RegisterDAO.java × | Globals.java × | QuizDAO.java × | QuizTopicDAO.java ×

```java
56      try {
57          FileWriter fileWriter = new FileWriter(file,  append: true);
58          BufferedWriter bufferedWriter = new BufferedWriter(fileWriter);
59          PrintWriter printWriter = new PrintWriter(bufferedWriter);
60          printWriter.println("**************************************************
61          printWriter.println("Quiz "+ Globals.quizCode +" Generated to be Answered by " + Globals.student
62          printWriter.println("==============================================
63          printWriter.println("");
64          printWriter.println("");
65          printWriter.flush();
66          printWriter.close();
67          bufferedWriter.close();
68          fileWriter.close();
69      } catch (IOException e) {
70          e.printStackTrace();
71      }
72
73
74      System.out.println("");
75      System.out.println("Quiz Started.\n\nFor MCQ Question, enter only the letter corresponding to the ri
76      int questionID = 0, topicId=0, difficulty=0, questionsCount = 1, marksCount = 0;
77      String question = "", questionType = "", answer = "", userAnswer = "", a = "", b = "", c = "", d = "
78      String getQuizTopicsQuery = "SELECT * FROM topicquiz WHERE idquiz=?";
79      String getQuizTopicsQuestionsQuery = "SELECT * FROM questions WHERE idtopics =? AND difficulty =?";
80      String getQuestionsMCQ_AnswersQuery = "SELECT * FROM mcqanswers WHERE idquestions=?";
81      String getQuestionsO_AnswersQuery = "SELECT * FROM answers WHERE idquestions=?";
82      try {
```

```
********************************************************************************
Quiz Vadrama101 Generated to be Answered by ngyibi
================================================================


1). Which variables are created when an object is created with the use of the keyword 'new' and destroyed when the object is de

A). Local variables
B).  Instance variables
C). Class Variables
D). Static variables


2). What is byte code in Java?

A). Code generated by a Java compiler
B). Code generated by a Java Virtual Machine
C). Name of Java source code file
D). Block of code written inside a class


A). Java SE
B). Java EE
C). Java 2E
D). None of the above


3). 'Who is known as father of Java Programming Language?

A). James Gosling
B). M. P Java
C). Charel Babbage
D). Blais Pascal


4). Which of these is returned by operator '&' ?
```
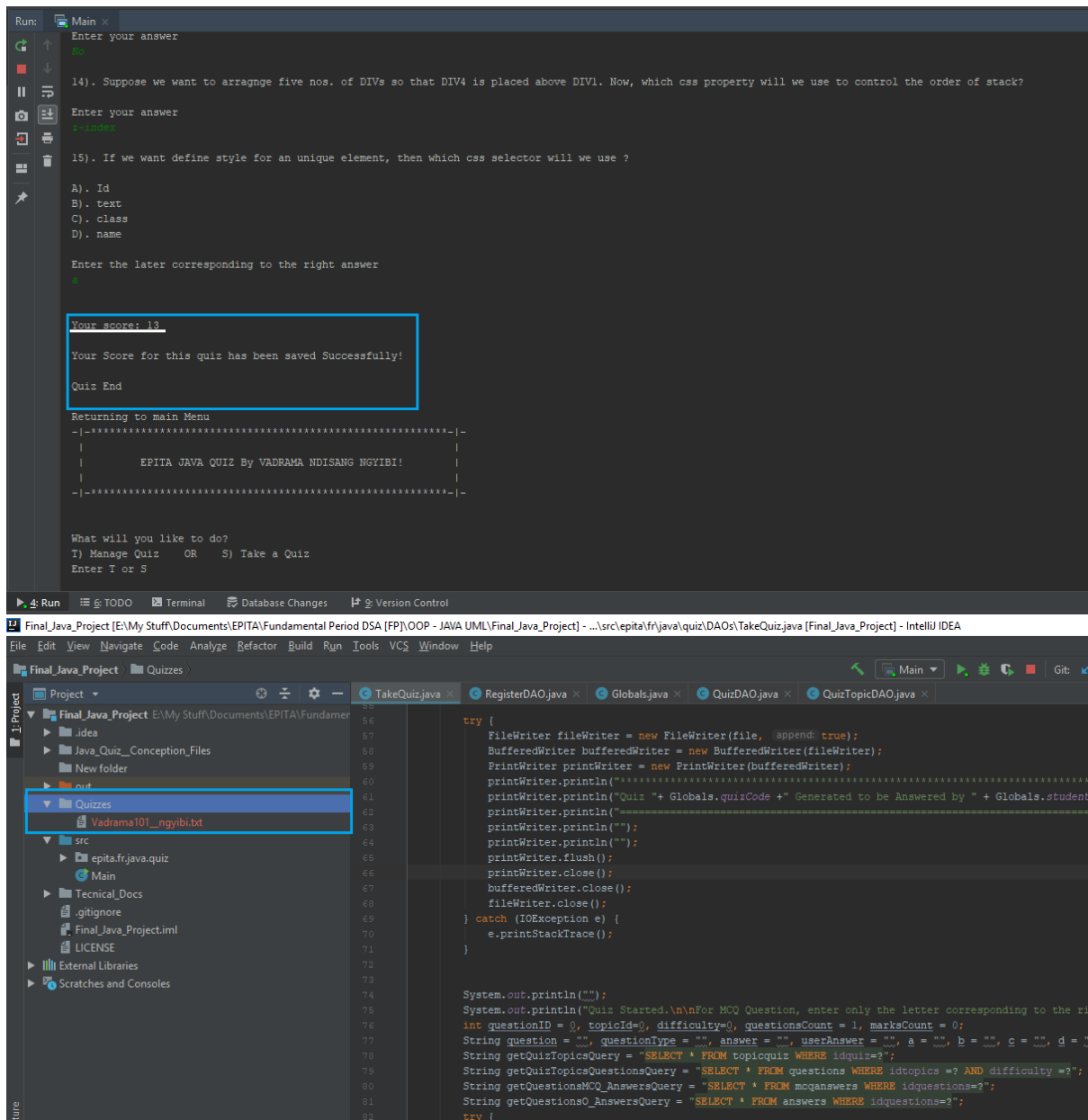
```
8). Which of the following are not Java keywords ?

A). double
B). switch

C). then
D). instanceof


9). What provides runtime environment for java byte code to be executed?

10). Does Python make use of decorators?
Answer True or False

11). What is the output of this expression, 3*1**3?

12). What is the answer to this expression, 22 % 3 is?

13). Can we align a Block element by setting the left and right margins ? Answer Yes or No.

14). Suppose we want to arragnge five nos. of DIVs so that DIV4 is placed above DIV1. Now, which css property will we use to d

15). If we want define style for an unique element, then which css selector will we use ?

A). Id
B). text
C). class
D). name


********************************************************************************
Quiz Vadrama101, Was Generated and Answered by ngyibi, Scored: 13/15
================================================================
```
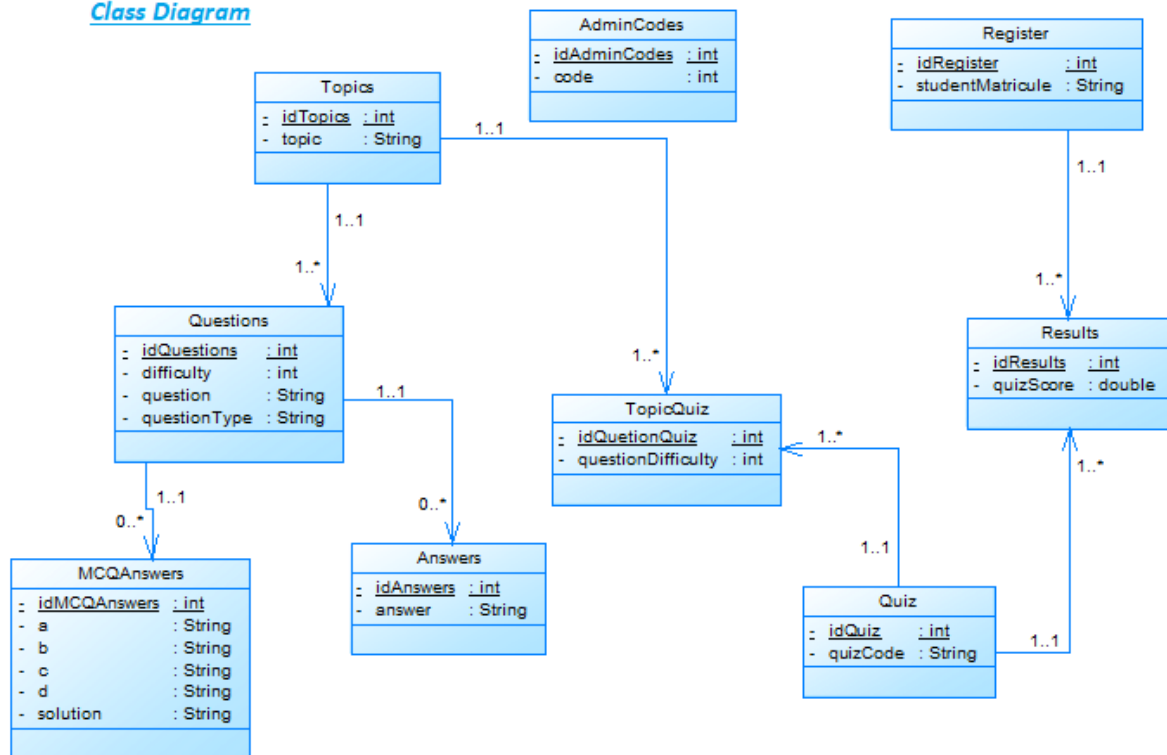
II. Project Conception Files and UML Diagrams
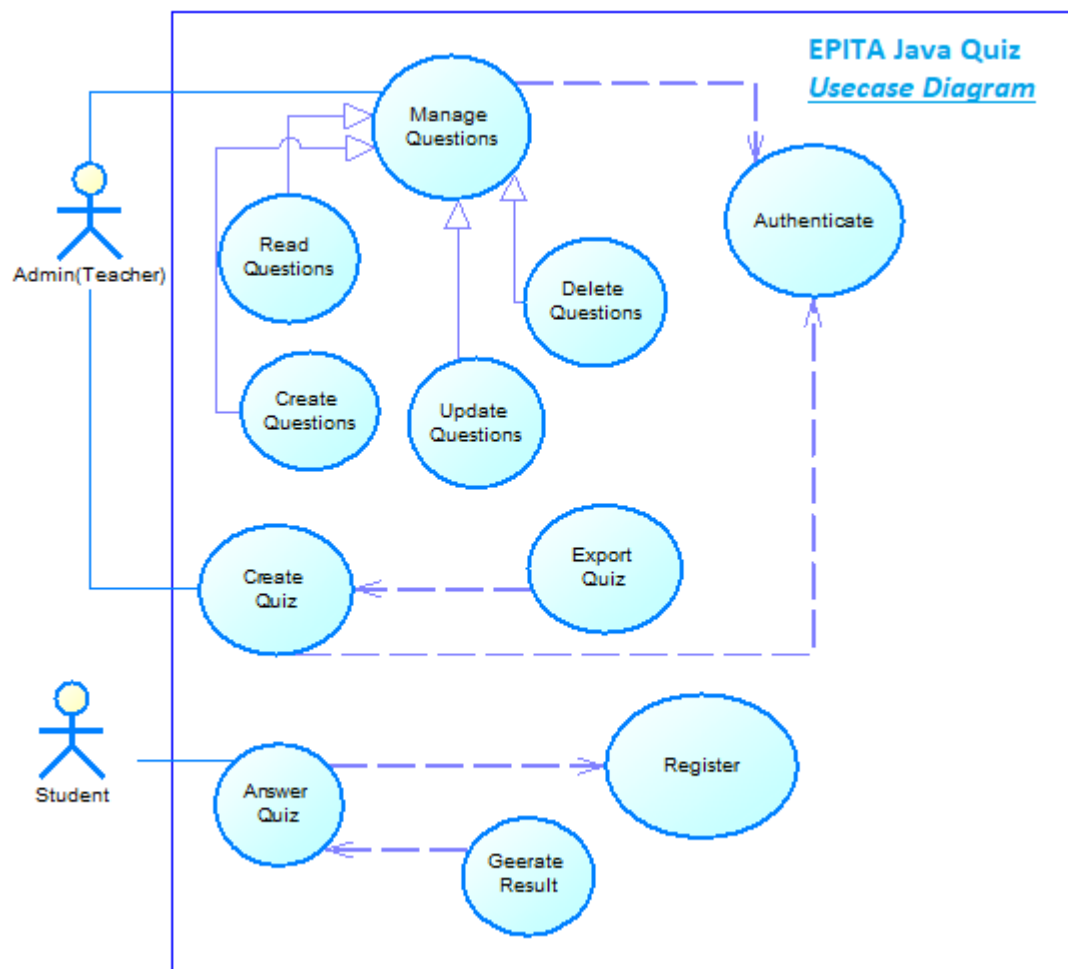
Use Case Diagram

EPITA Java Quiz
Class Diagram
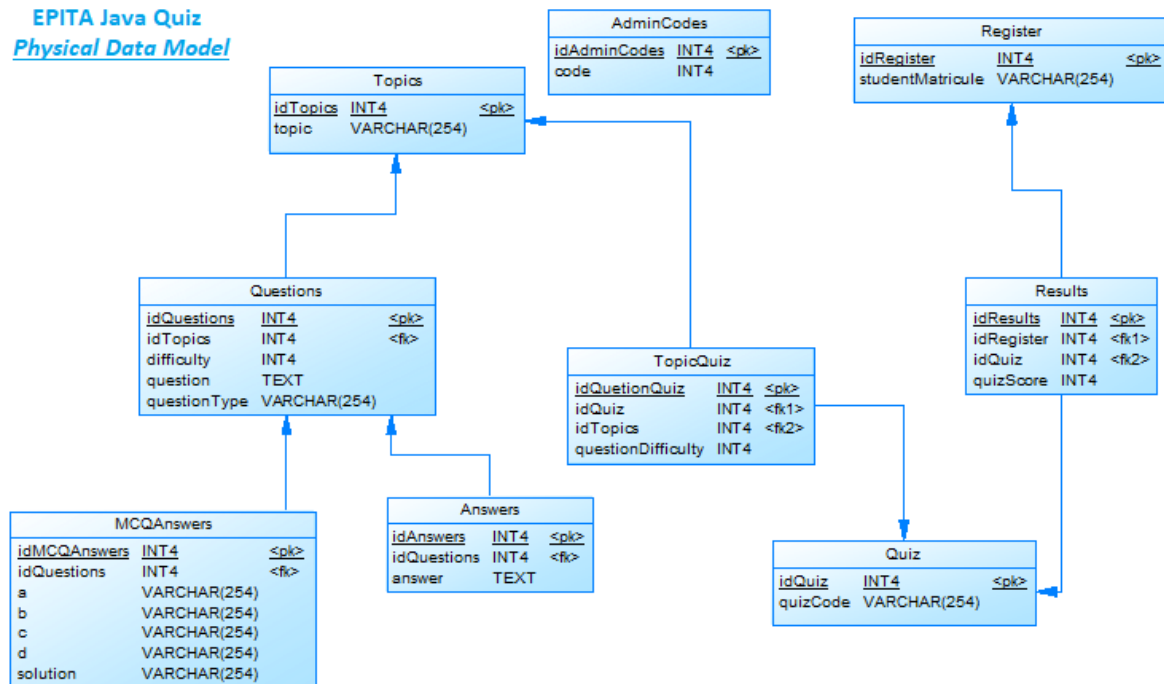

Class Diagram

EPITA Java Quiz
Physical Data Model

Physical Data Model Diagram