

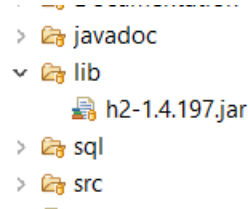
INSTALLATION AND COMPILATION NOTICE

Setting up the quiz program

1.1 Installing the pre-requisites

The quiz program requires

1. Java – JRE 1.8 and JDK 1.8
2. IDE (Eclipse) as it is a console application
3. H2 database (jar used – h2-1.4.197.jar)



1.2 Import the program from Github into Eclipse

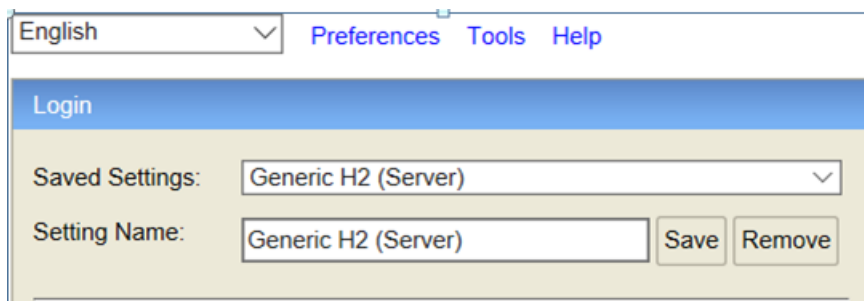
https://github.com/abhinayadurgi/JavaFundamental_Quiz.git

1.3 Setup the backend

Download H2 database and install it. Give the credentials. Test the connection

Use the same settings:

Generic H2 (Server)



Server mode

These are the parameters used in the program.

English

Preferences

Tools

Help

Login

Saved Settings: Generic H2 (Server)

Setting Name: Generic H2 (Server) Save Remove

Driver Class: org.h2.Driver

JDBC URL: jdbc:h2:tcp://localhost/./test

User Name: test

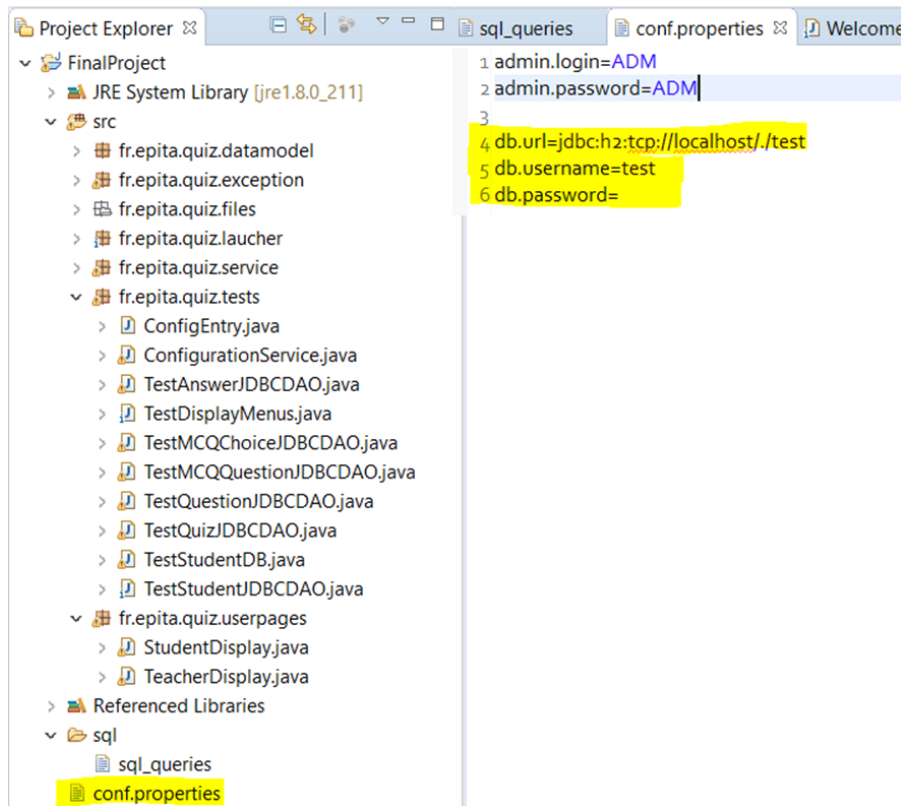
Password:

Connect Test Connection

Test successful

If your credentials are different, these changes must be made in the program.

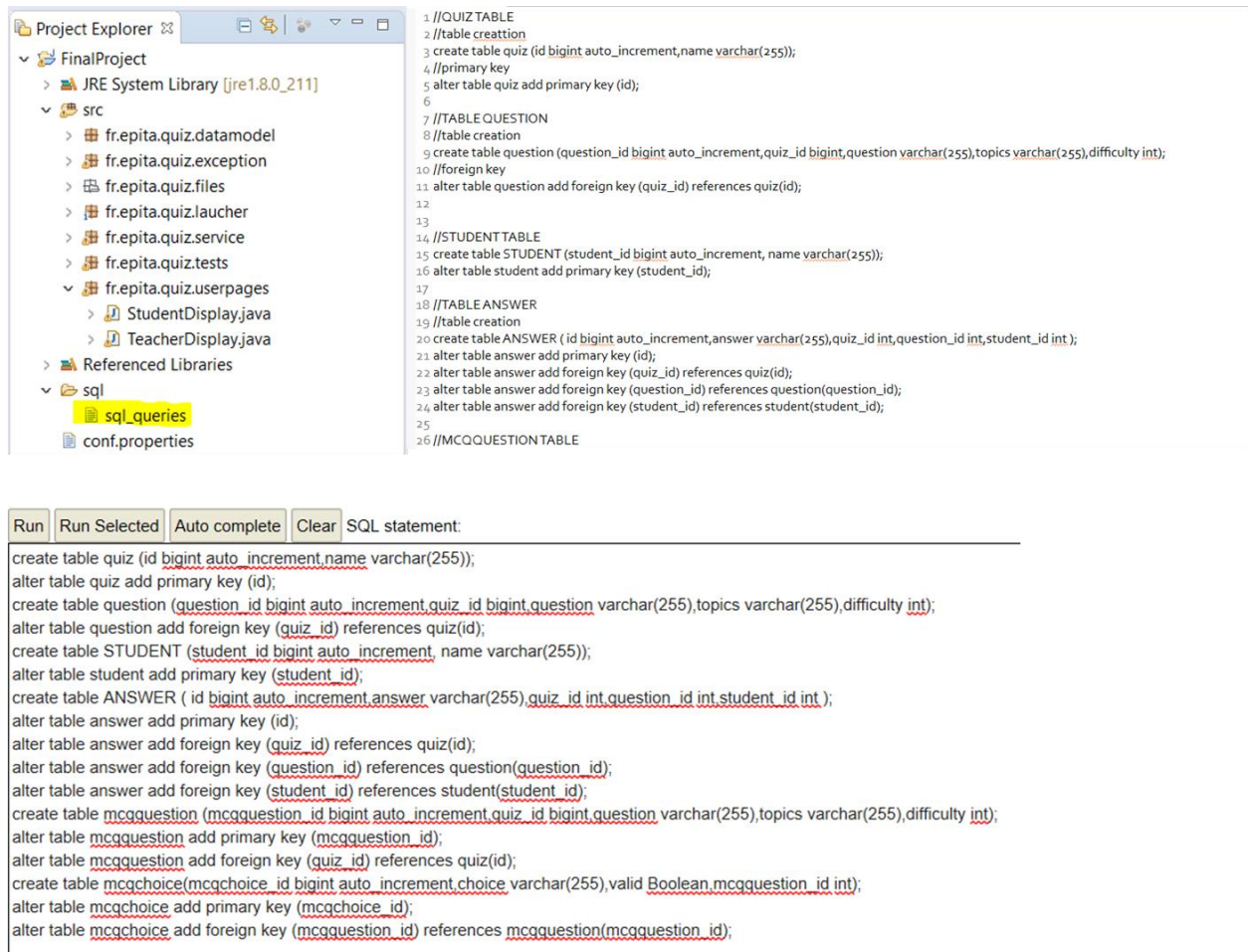
In the program, the database connection details are stored in the conf.properties file.
Edit the conf.properties file with your credentials



1.4 Creating the tables

There is a sql_queries file in the folder SQL

Run the queries in the same order in the H2 console to create the tables.



The screenshot shows an IDE interface. On the left, the 'Project Explorer' pane displays a project named 'FinalProject'. Under the 'src' folder, there are several subfolders and files, including 'fr.epita.quiz.datamodel', 'fr.epita.quiz.exception', 'fr.epita.quiz.files', 'fr.epita.quiz.launcher', 'fr.epita.quiz.service', 'fr.epita.quiz.tests', 'fr.epita.quiz.userpages', 'StudentDisplay.java', and 'TeacherDisplay.java'. Below these, under 'Referenced Libraries', there is a folder named 'sql' which contains a file named 'sql_queries' highlighted in yellow. On the right, the 'SQL statement' pane shows a list of SQL queries. The queries are numbered 1 through 26. The first 25 queries are for creating tables and adding foreign keys. The 26th query is for creating an 'MCQUESTION TABLE'. The queries are as follows:

```
1 //QUIZ TABLE
2 //table creation
3 create table quiz (id bigint auto_increment,name varchar(255));
4 //primary key
5 alter table quiz add primary key (id);
6
7 //TABLE QUESTION
8 //table creation
9 create table question (question_id bigint auto_increment,quiz_id bigint,question varchar(255),topics varchar(255),difficulty int);
10 //foreign key
11 alter table question add foreign key (quiz_id) references quiz(id);
12
13
14 //STUDENT TABLE
15 create table STUDENT (student_id bigint auto_increment, name varchar(255));
16 alter table student add primary key (student_id);
17
18 //TABLE ANSWER
19 //table creation
20 create table ANSWER ( id bigint auto_increment,answer varchar(255),quiz_id int,question_id int,student_id int );
21 alter table answer add primary key (id);
22 alter table answer add foreign key (quiz_id) references quiz(id);
23 alter table answer add foreign key (question_id) references question(question_id);
24 alter table answer add foreign key (student_id) references student(student_id);
25
26 //MCQUESTION TABLE
```

Below the SQL statements, there is a 'Run' button, a 'Run Selected' button, an 'Auto complete' button, and a 'Clear' button. The 'SQL statement' text area contains the following SQL statements:

```
create table quiz (id bigint auto_increment,name varchar(255));
alter table quiz add primary key (id);
create table question (question_id bigint auto_increment,quiz_id bigint,question varchar(255),topics varchar(255),difficulty int);
alter table question add foreign key (quiz_id) references quiz(id);
create table STUDENT (student_id bigint auto_increment, name varchar(255));
alter table student add primary key (student_id);
create table ANSWER ( id bigint auto_increment,answer varchar(255),quiz_id int,question_id int,student_id int );
alter table answer add primary key (id);
alter table answer add foreign key (quiz_id) references quiz(id);
alter table answer add foreign key (question_id) references question(question_id);
alter table answer add foreign key (student_id) references student(student_id);
create table mcgquestion (mcgquestion_id bigint auto_increment,quiz_id bigint,question varchar(255),topics varchar(255),difficulty int);
alter table mcgquestion add primary key (mcgquestion_id);
alter table mcgquestion add foreign key (quiz_id) references quiz(id);
create table mcgchoice(mcgchoice_id bigint auto_increment,choice varchar(255),valid Boolean,mcgquestion_id int);
alter table mcgchoice add primary key (mcgchoice_id);
alter table mcgchoice add foreign key (mcgquestion_id) references mcgquestion(mcgquestion_id);
```

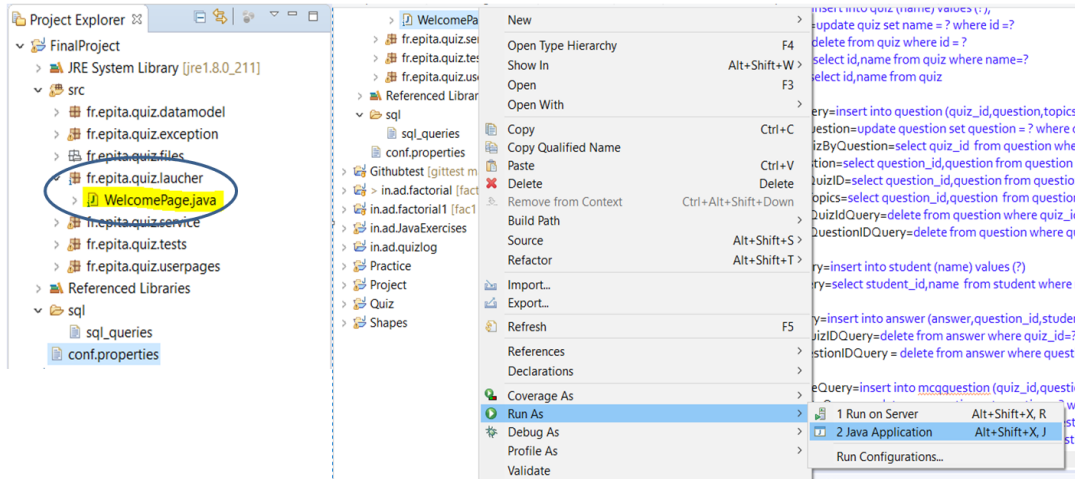
LAUNCHING THE PROGRAM

The main method of the program is in the launcher package of the project

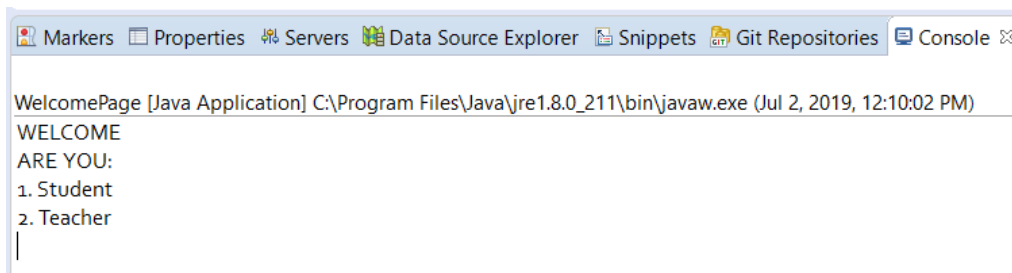
The class with the main method is called WelcomePage.java

Run this class to launch the program

Right Click on the WelcomePage.class -> Run As -> Java Application



It displays the welcome page on running the application



Enter your choice

Note: When the program is first executed, the tables are empty and do not have data. The data must be entered by the user. So Create quiz, open questions and MCQ questions before taking a quiz.

If there is a problem with the database connection, an error message is displayed the program is terminated. Please check connections and try again.

