QUIZ MANAGER

Fundamental Java Project

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USER GUIDE

EPITA

USER GUIDE

The application is providing the users a GUI plateform where the teacher can write and submit a set of questions depending on his chosen topic (in my case I made two topics which are Java(MCQ) and Math (Open question)) and the difficulty level.

However, the student will answer those questions depending on his chosen topic and difficulty level(from the very easy to extremely hard) and then he will get the result (10 points per question = ?/100) and the evaluation in case he choose the Java topic (MCQ) , but if he choose the open question (Math topic in my application) then after he finishes answering , then it will be exported into a PDF file which will be contaning all the open questions with his answers, so then the teacher can evaluate it.

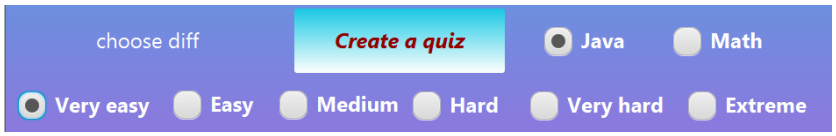
The Teacher

The teacher will perform the following tasks for the MCQ and the Open question:

1. **Creates Questions**: The teacher , has to choose a topic and then he will create a question or add a new question.
   In our case, if he chooses the Java topic(which is MCQ) then he will have to write for each question his proposed answers(one of them is right answer), and at least he must **create 10 questions or more**.
   If he chooses the open question(Math topic), then he will have to write the question only with one answer (how should be the right answer)

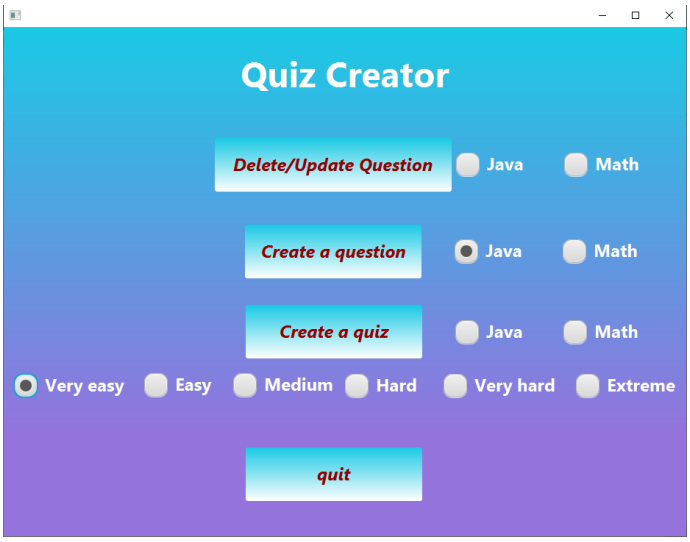
2. **Difficulty Level**: before he starts writing the questions , he has to Assign difficulty level to the questions (which goes from the very Easy to Extreme)

NB: The teacher has to submit at least 10 questions for each difficulty level, otherwise , the student won't be able to attempt the quiz , which means (Technically, the Button "Create a Quiz" will not work) which is the follwing:



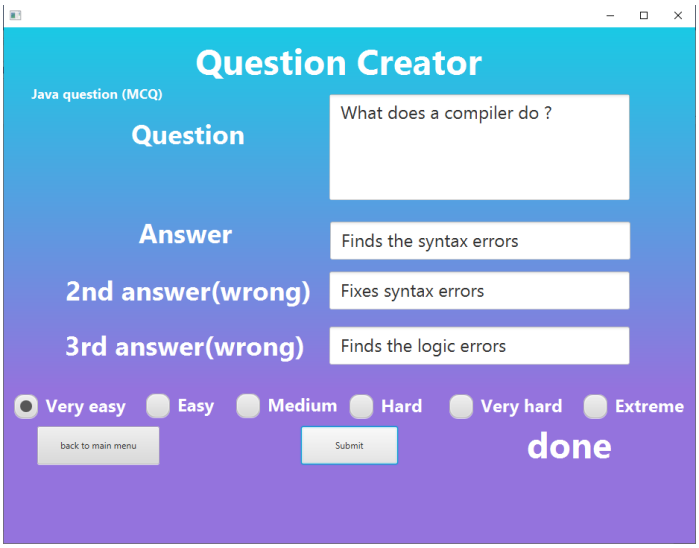
3. Update the Questions, the answer or the difficulty level: Existing questions can be modified or deleted, and the difficulty level can be changed as well.

STEP-1: chose a Topic , choose difficulty level and then click on the Button

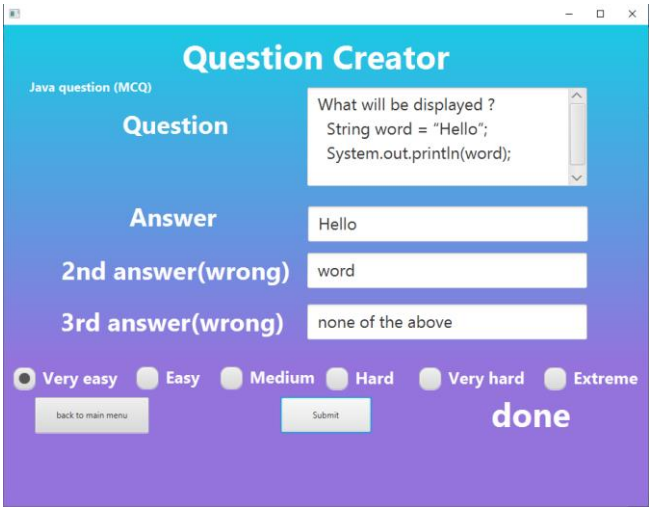


STEP-2: Choose the difficulty level , write the Question and the proposed answers (just one will be right) and then click on the Button

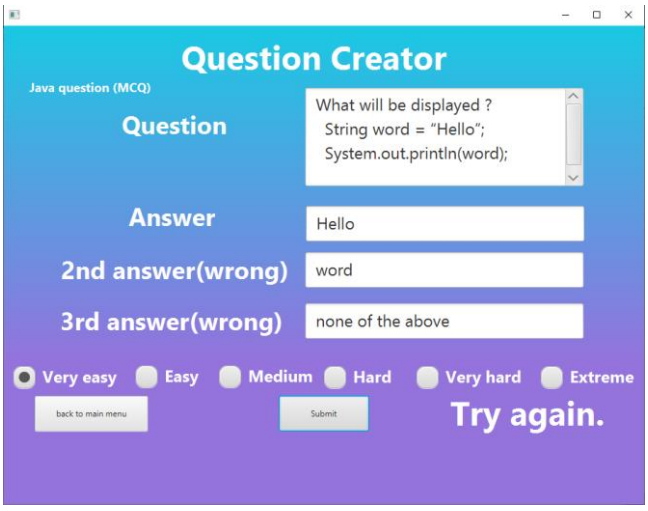
In here , the Textbox for Answer is where the right answer should be put by the teacher

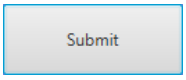


STEP-3: When **done** is displayed, that means , the question and its answers have been stored already in the database, So sipmly the next , is to remove what he has written (**using the backspase of the Keyboard**) and then write the next questions and its proposed answers for each.



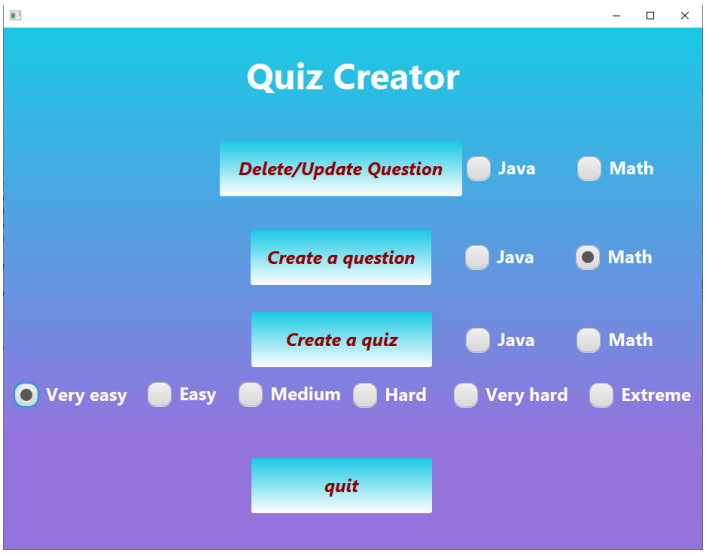
You cannot submit the same question more than one time, otherwise **Try again** will be displayed As the following:



So, in this case all what the user (Teacher) has to do is that he remove by the backspase from the keyboard again , the last question and its proposed answers, and write a new one with its proposed answers and then clik on  Button again!

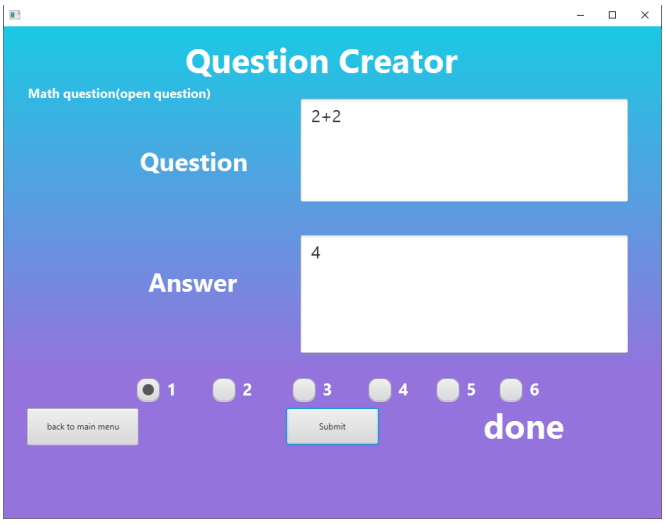
And he must keep putting the questions and its proposed answers, till he reach 10 or more as I have already mentioned previously , otherwise the stuend won't be able to attempt the questions.

Now if the user (Teacher) choose the other topic (in my case Math topic) , then he will have to do the same as for the Java topic , just in this case , he will put only the questions with the right answer (how it should be the result), because it is an open question, and also at least **10 questions or or more** , and the can put same question more than one time!



So, for the math, which is open question, he will put the question after choosing the difficulty level

This way is filling it as the following after clicking on the **Create a question** button:



In here, the difficulty levels are represented by numbers (from 1 up to 6 => Easy to Extreme)

So here, **1** represents the very Easy difficulty level.

So, the teacher is writing the question and how it should be the answer given by the student. The user (Teacher) must submit at **least 10 or more questions for each difficulty level** otherwise the problem will occur (The Button Create a quiz in the main menu will not take an action and open the questions for the student, so the student won't be able to attempts the questions!!)

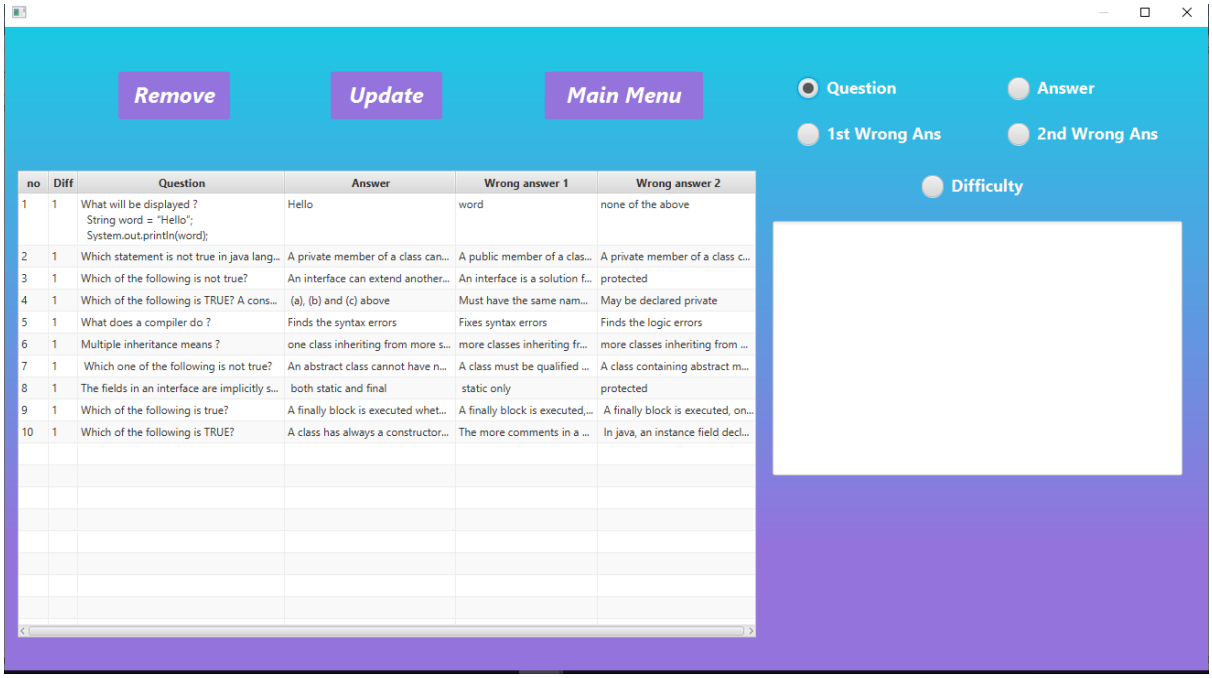
When **done** is displayed, that means that the data has been stored successfully in the database, so the user (Teacher) will have to remove the previous question and answer from the textboxes using the backspace key of the keyboard and then put the next question, otherwise , **Try again** will be displayed!

Updating/Deleting

The teacher can update or delete as well, and that can be applied on all, including the answers, questions and even the difficulty levels.

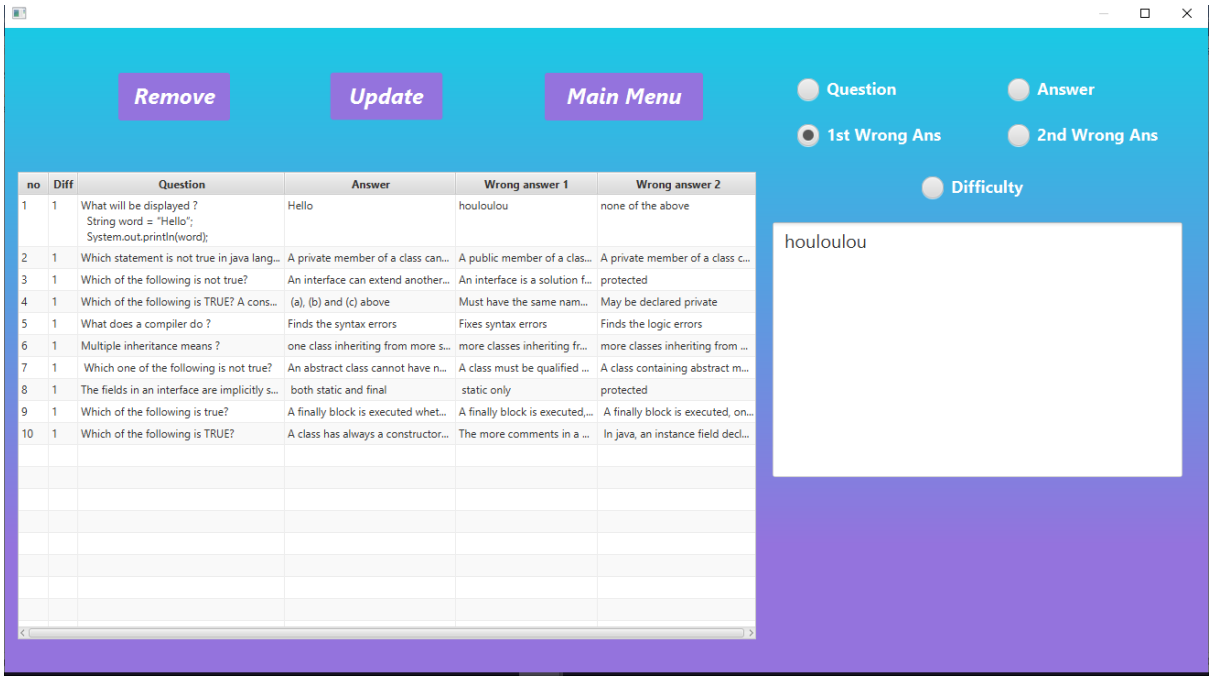
so, he just must choose a topic and click on

button in the main menu and then start whether updating or deleting, as I am showing in the following:



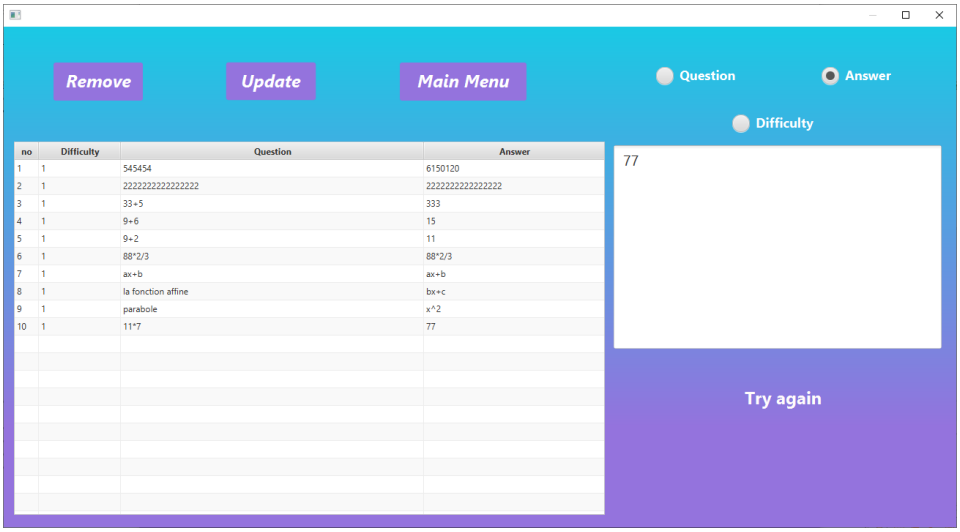
The teacher will choose whether to delete or update, if he wants to delete then, simply he click on his chosen question or answer and then click on the Remove button.

However, if he wants to update then he must click on his chosen question, answer or the difficulty level, and then , he write in the empty text zone the new data he wants put instead, and then click on the update button so it will be stored in the database.



no	Diff	Question	Answer	Wrong answer 1	Wrong answer 2
1	1	What will be displayed ? String word = "Hello"; System.out.println(word);	Hello	houloulou	none of the above
2	1	Which statement is not true in java lang...	A private member of a class can...	A public member of a clas...	A private member of a class c...
3	1	Which of the following is not true?	An interface can extend another...	An interface is a solution f...	protected
4	1	Which of the following is TRUE? A cons...	(a), (b) and (c) above	Must have the same nam...	May be declared private
5	1	What does a compiler do ?	Finds the syntax errors	Fixes syntax errors	Finds the logic errors
6	1	Multiple inheritance means ?	one class inheriting from more s...	more classes inheriting fr...	more classes inheriting from ...
7	1	Which one of the following is not true?	An abstract class cannot have n...	A class must be qualified ...	A class containing abstract m...
8	1	The fields in an interface are implicitly s...	both static and final	static only	protected
9	1	Which of the following is true?	A finally block is executed whet...	A finally block is executed,...	A finally block is executed, on...
10	1	Which of the following is TRUE?	A class has always a constructor...	The more comments in a ...	In java, an instance field decl...

The same principal goes for the open question, which is in my application Math topic



no	Difficulty	Question	Answer
1	1	545454	6150120
2	1	2222222222222222	2222222222222222
3	1	33+5	333
4	1	9+6	15
5	1	9+2	11
6	1	88*2/3	88*2/3
7	1	ax+b	ax+b
8	1	la fonction affine	bx+c
9	1	parabole	x^2
10	1	11*7	77

The Student

STUDENT: Will have to perform the following actions:

1. **Topics Selection**: The student can choose the topic of the quiz based on his interest.

2. **Difficulty Level Selection**: The student can choose the difficulty level from the very Easy up to Extreme difficulty level.

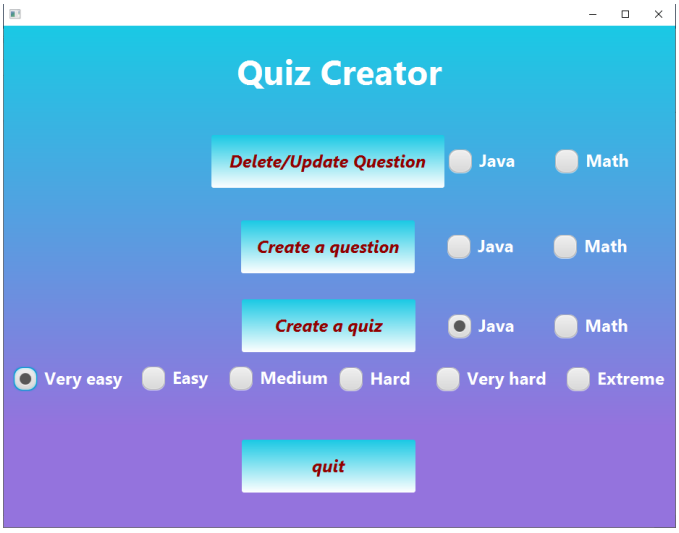
3. **Starting the quiz**: student can commence the quiz

4**. See the results**: The result will be displayed instantly once the student ends the quiz, the grade (score will be /100; 10 points per question) , but if he choose to perform an open question , then his answers will be exported into a pdf file , so then the teacher can evaluate the results of the student's attempts.

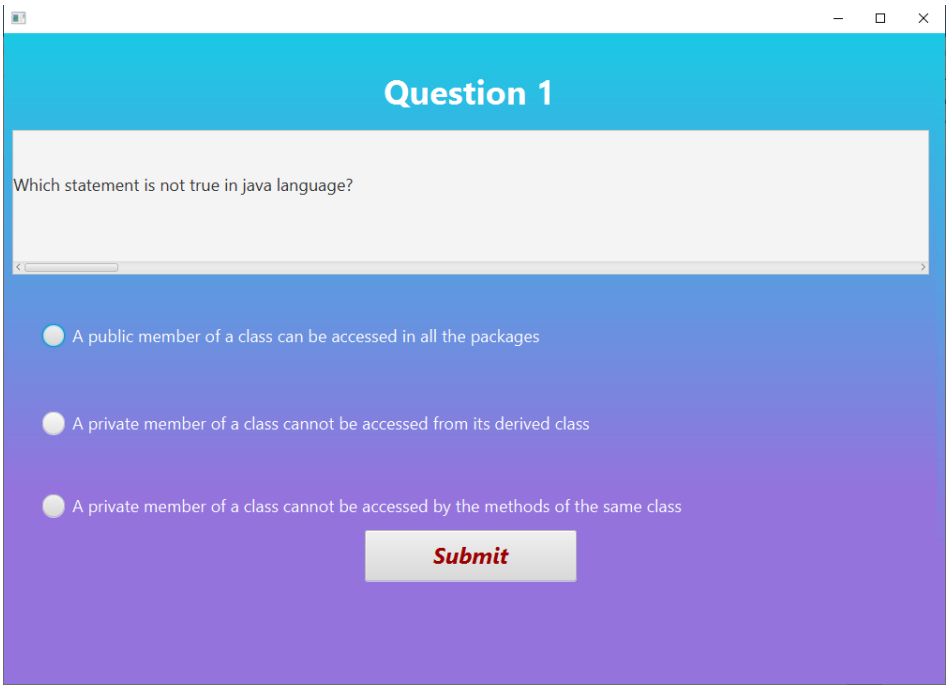
First, the student must choose the topic and the difficulty level, and then he will have to click on the

button to start the quiz.

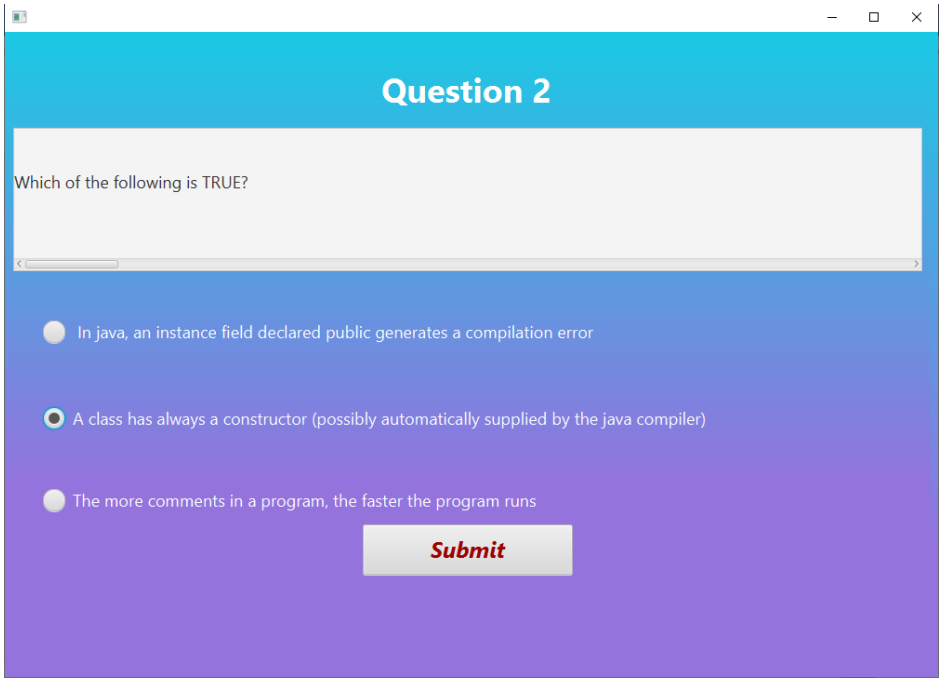
So, in case he chooses the java topic and the very easy difficulty level he will perform the following:



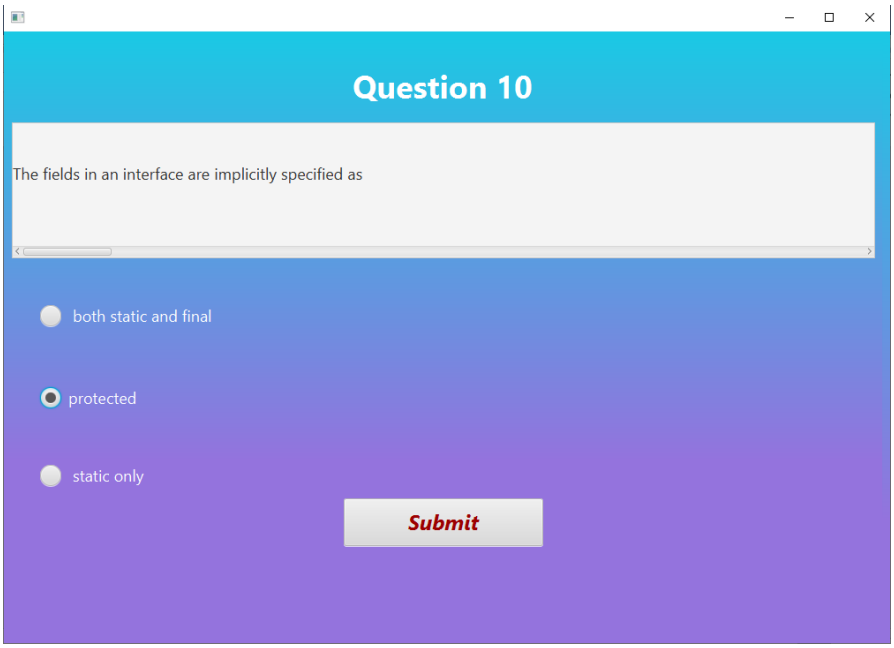
The student will have to answer the MCQ:



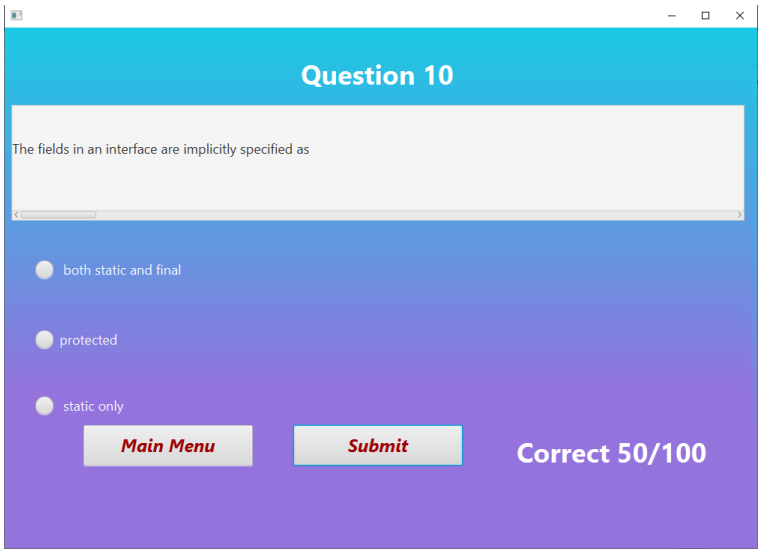
Once he click on one of the provided choices and then, he will have submit it by clicking on the button and then he will be forwarded to the next question, so a counter will start counting 10 point per a good answer.


Question 2
Which of the following is TRUE?
In java, an instance field declared public generates a compilation error
A class has always a constructor (possibly automatically supplied by the java compiler)
The more comments in a program, the faster the program runs
Submit

-
-
-
-

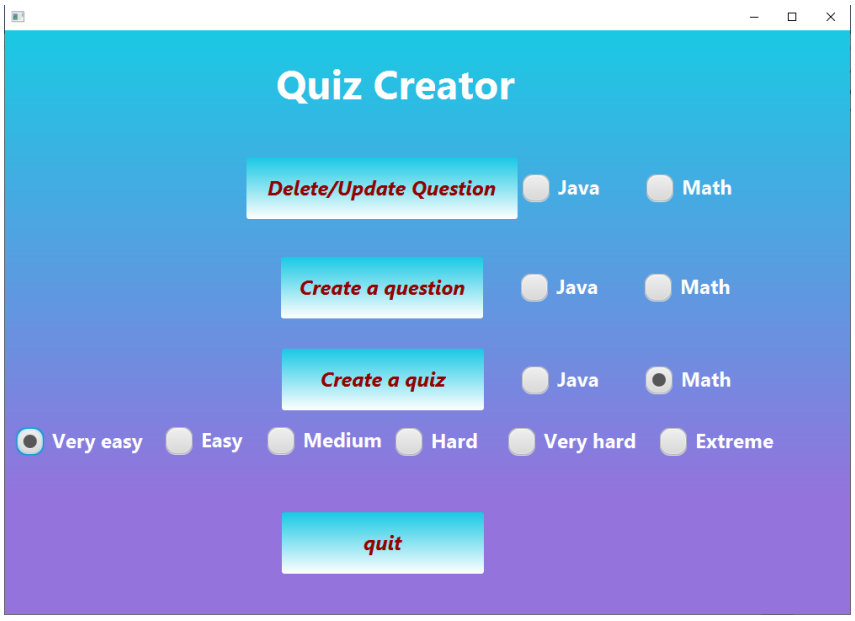

Question 10
The fields in an interface are implicitly specified as
both static and final
protected
static only
Submit

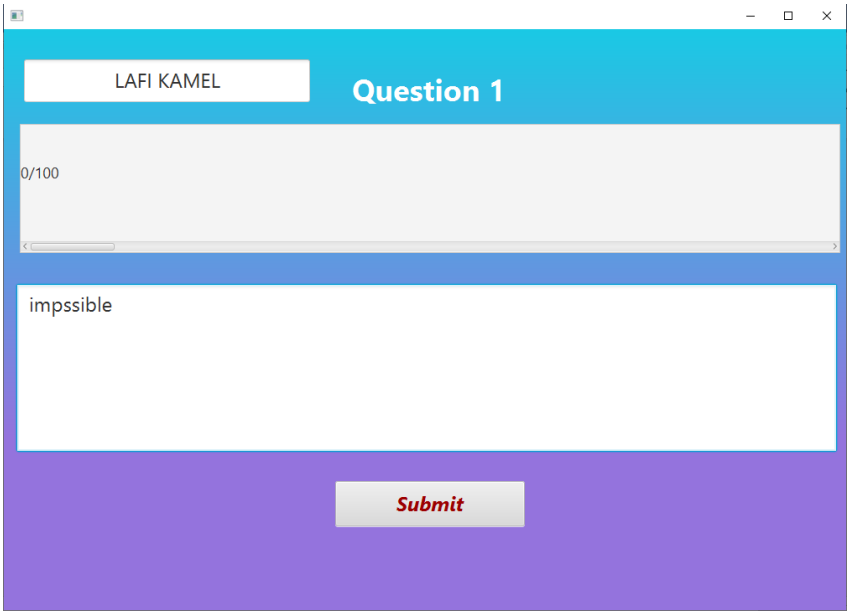
Now, he will see his result (Score=?): in here it is showing that he answered 5 correct answers out of 10, so the total is 50/100



Now , in case the student choose the math topic which is an open question and the difficulty level and then the button, then he will have to write his name on top first and then start answering and submit each one to get forwarded to the next question, so when he finishes, a PDF file will be generated containing the all the questions and his answers, so then the teacher can evaluate them.

As the following:





When clicking **Submit** button, he will be forwarded to the next question.

-
-
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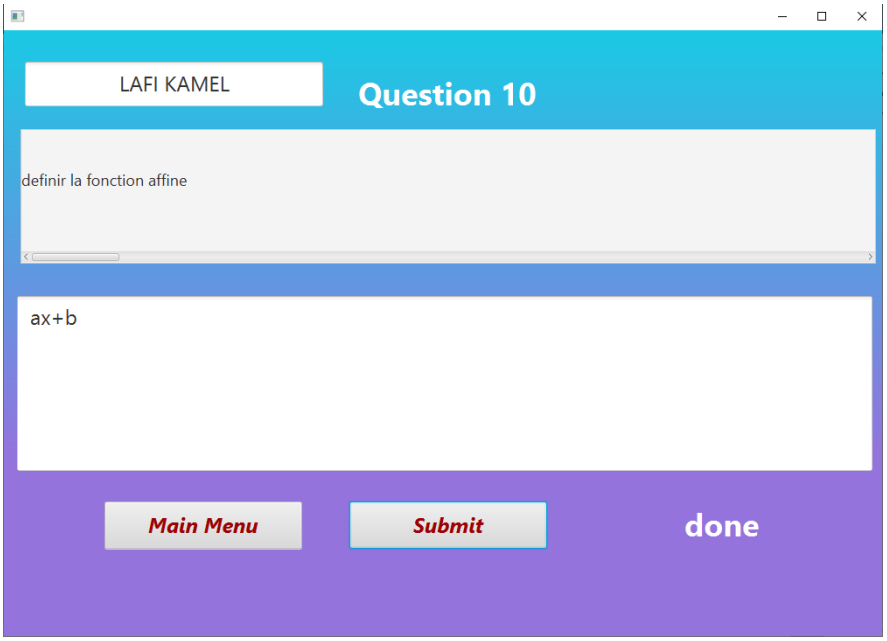
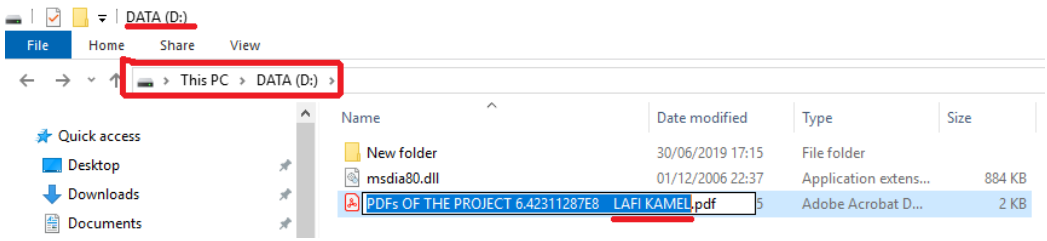


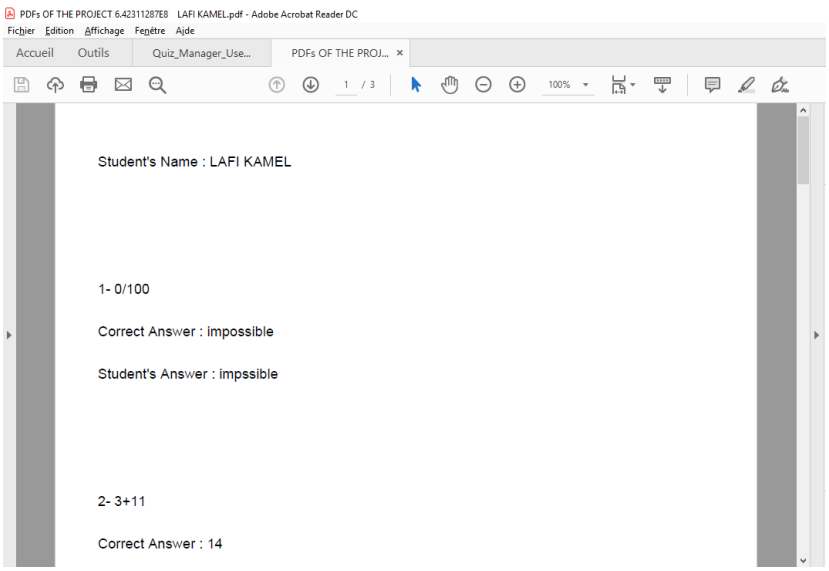
So, once he finishes, a PDF file containing the student's name and all the questions with his answers!

```
/**
 * change the destination of the PDF
 */
PdfWriter.getInstance(doc, new FileOutputStream("d:/PDFs OF THE PROJECT "+n+"    "+tf_name.getText()+".pdf"));
doc.open();
doc.add(new Paragraph("Student's Name : "+tf_name.getText()));
for (int i = 0; i < 10; i++) {
    doc.add(new Paragraph("\n\n\n\n\n"+(i+1)+"- "+Fresh_list.get(i).getContent()+"\n\nCorrect Answer : "+Fresh_list.get(i).getAns()+"\n\nStudent's Answer : "+answers[i]));
}
doc.close();
```

Here, am showing the code, just to the user where he can find his PDF document after he submits, in my case, it was redirected to the destination **d:/** drive as you can see in the code, so the student can change the redirection destination, he is free to change to whatever destination, he will have just to put the destination in the code as you can see just up in the code.



And here there some of that pdf's content:



NB: Please keep in mind that the student cannot attempt the questions if it is not filled by the teacher with 10 questions, and that must be for each and every difficulty level for both topics!!! The teacher fills and then the Student attempts the quiz and get the result.

Please, do send me an E-mail in case you require any further support!

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