



King Fahd University of Petroleum

Project Report for ICS108

Group 22

#YAZID ALSAEED, 201915010

#SAGER ALSOKARI, 201970710

Project Description:

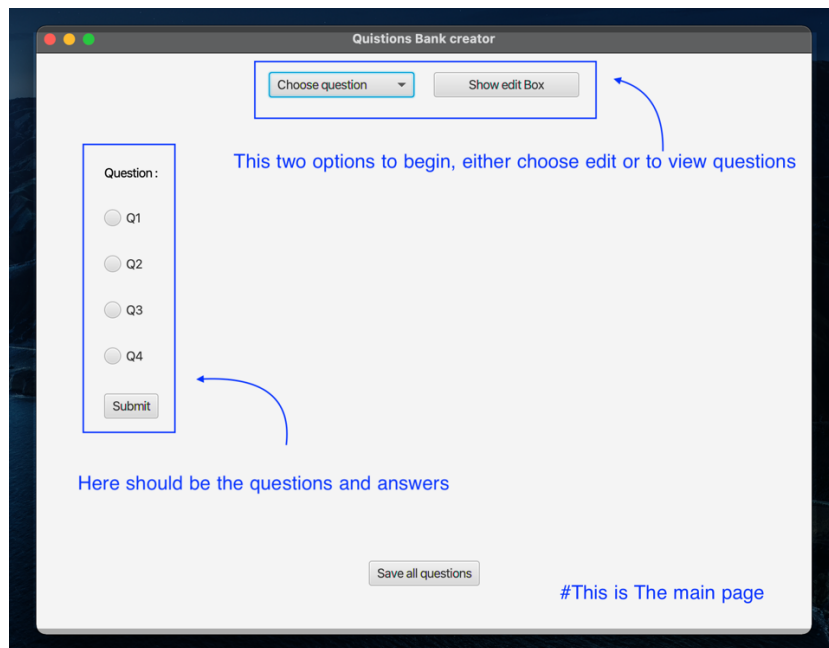
We were asked to write Java application and implement JavaFX to create graphical user interface (GUI). The application is question bank creator. The user can create, edit, view, and delete questions. The application should be in object-oriented design methodology. Questions with answers should be written in a binary file, when the application start the questions with the answers should be loaded to array. While the application run edits should be saved in the array. After closing the application questions and answers saved back to the binary file.

Solution Description:

We create 3 classes. Main class for running the application, class for reading and writing data to binary file, class for the questions with the answers. There is an array list for the questions and the answers. We designed a graphical user interface using JavaFX. In the question class we use some setters and getters like “getAnwser” and “setNewQuestion”. And in the binary file class, we create two method one for saving and one for loading. Finally we designed our program with the Object-Oriented-Programming in this program to reach our and the course goal.

Screenshots:

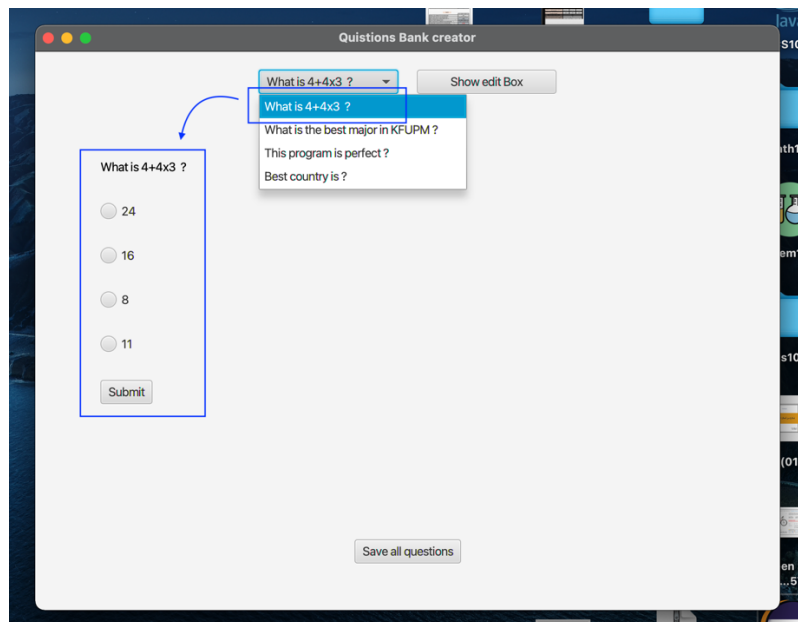
- Main Page:



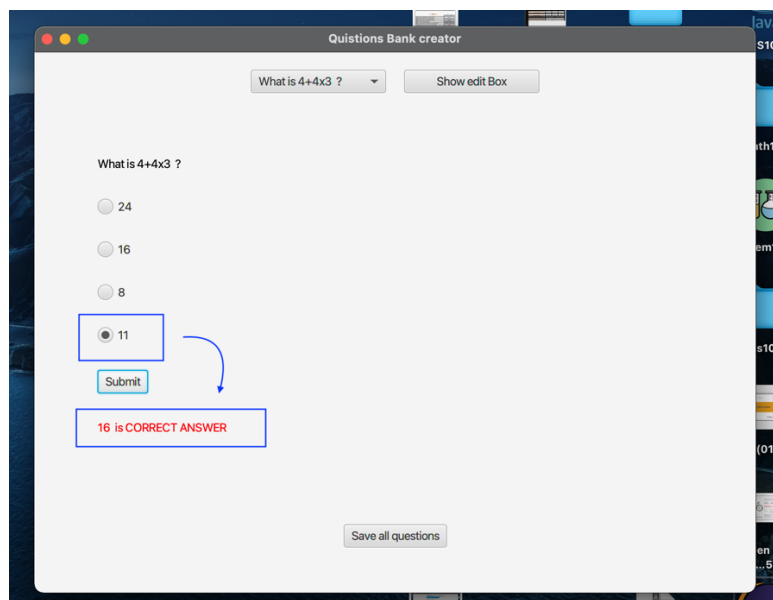
As we can see, there is two main boxes one for choosing questions and the other for edit questions.

Also, we can see the questions and the answers, and it is change once we choose another question from combo Box.

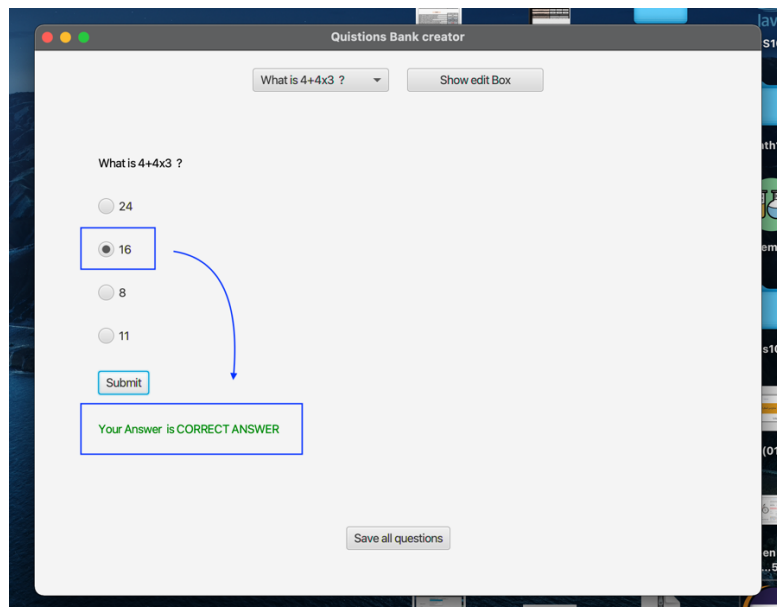
- View questions:



In here, when choose specific question it will show in left of the page with answers.

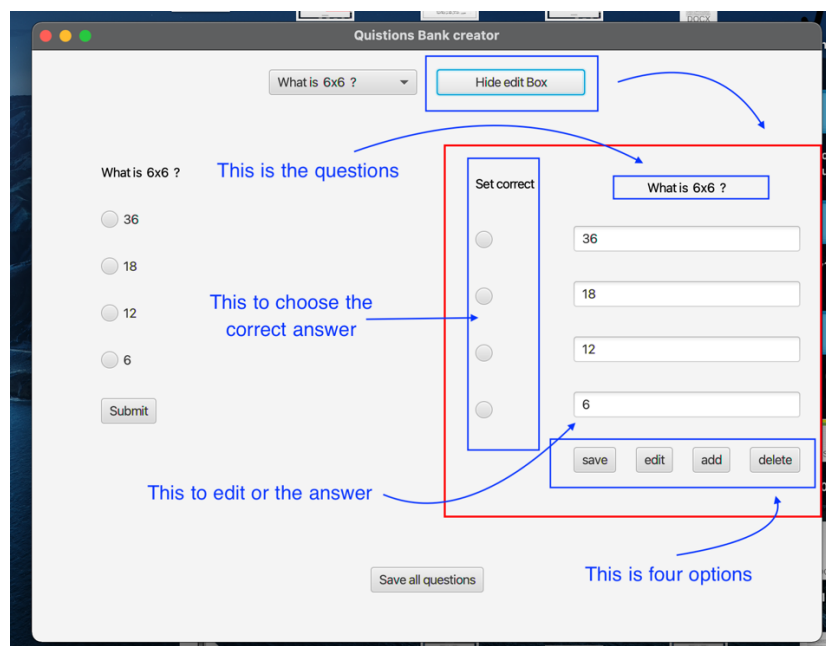


When we choose incorrect answer, it will show a message.



Otherwise, when choose correct one it will show a message also.

- Edit Box:

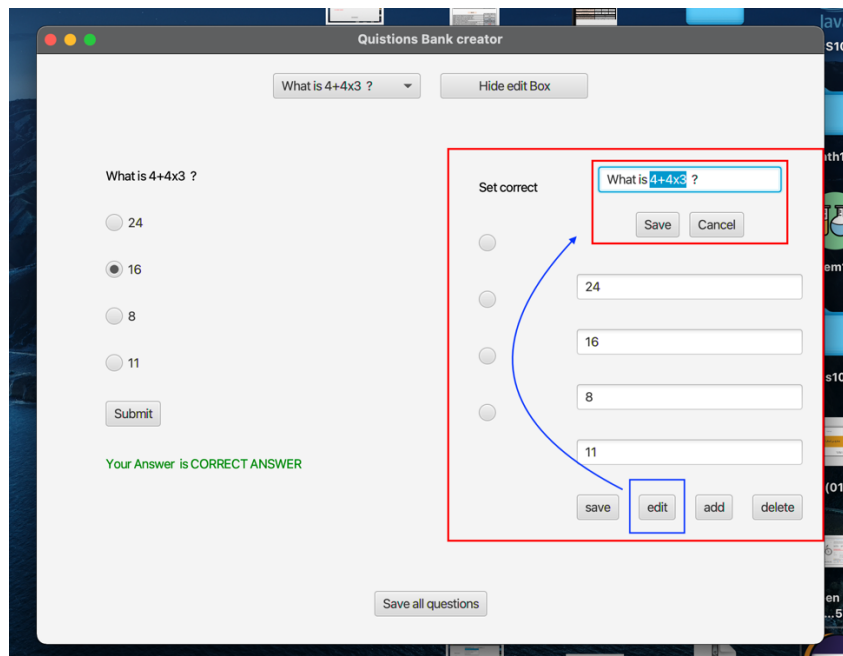


Here things get more complicated, when we click on show edit box it will show a edit box.

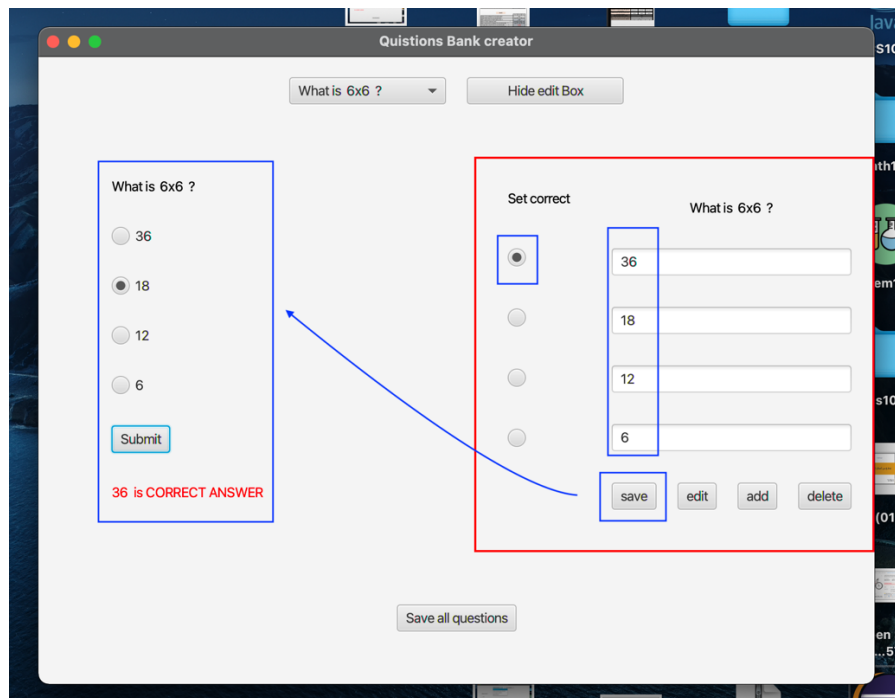
The Edit Box have (the questions, answers, radio button to set the correct answer an four options to edit each questions).

Now we will describe the job of each options:

- Edit Option:

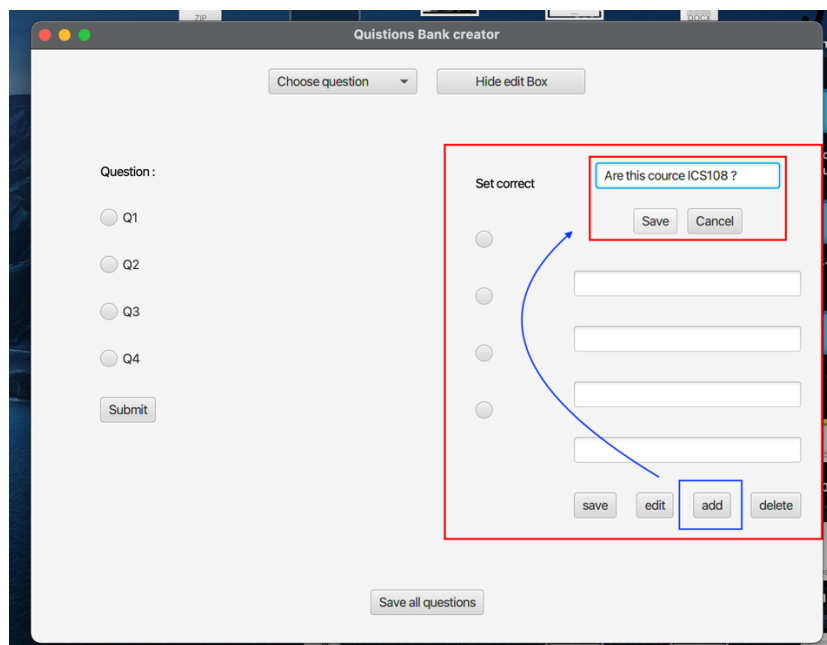


When we click edit, we can edit the question name. However, you should click on save to save the new question only!



After that we can change each answer, or we can stay it as it is. After that we should click save and It will save and show in the left side of the page.

- Add option:



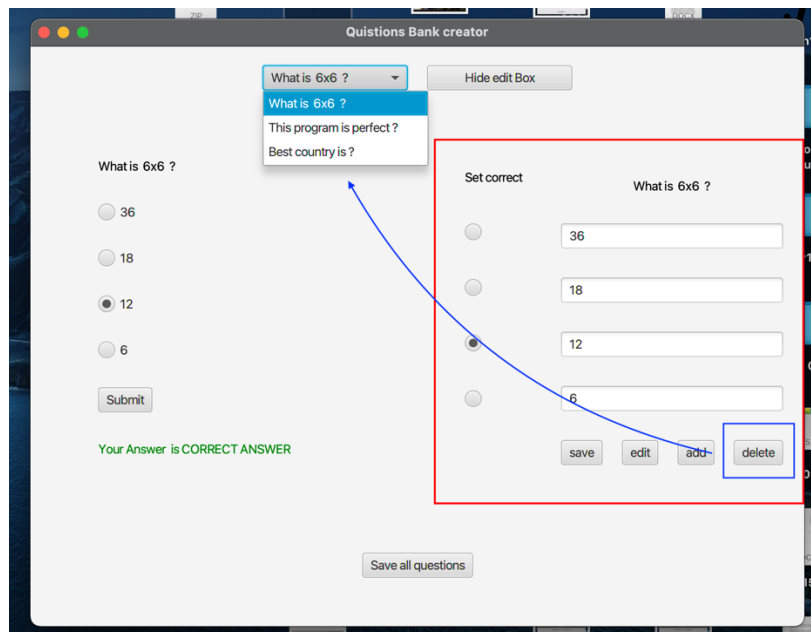
When we click add, we should insert the new question then enter save to save the question.

The screenshot shows a web application titled "Questions Bank creator". At the top, there is a dropdown menu labeled "Are this course I..." and a button labeled "Hide edit Box". The main content area displays a question: "Are this course ICS108 ?". Below the question, there are four radio buttons. The first radio button is selected and labeled "True". The second radio button is labeled "False". Below the radio buttons, there is a blue "Submit" button. Below the "Submit" button, the text "Your Answer is CORRECT ANSWER" is displayed in green. To the right of the main form, there is a red-bordered box containing a "Set correct" section. This section has a "True" radio button (selected) and a "False" radio button. Below these are two empty text input fields. At the bottom of the red box are four buttons: "save", "edit", "add", and "delete". A blue arrow points from the "save" button in the red box to the "True" radio button in the main form. At the bottom of the main form, there is a "Save all questions" button.

After that, we should insert each answer with the correct answer (by checking the radio button).

Now, when we click save we will see the question and answers and when we click submit we will now which answer is correct.

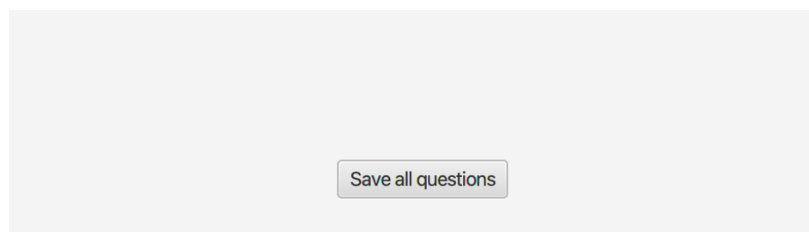
- Delete:



When we choose the answer, we want to delete it, we just click delete.

As you see, the question is deleted form combo box.

- Save:



This button is to save all the changes in the binary file.

Work Distribution:

YAZID ALSAEED: class for the questions, Array for the questions.

Sager Alsokari: class for writing and reading from the file, report.

We both work in designing the graphical user interface.

Finally:

Of course this report will not explain everything, but we tried our best to give a small and meaningful brief about our program and we hope it is clear and reached the goal we want. Hopefully in the future, we will be able to do much better than this.