

A-team 13

Quiz Generator

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[Team Project -- Quiz Generator](#)

Quiz Generator Design Document

Class Summary

<i>enum, interface, class, abstract class</i>	<i>Name of the type</i>	<i>Description of use or purpose of this type</i>
class	Question	Store the text, image, topic, and choices of a question
class	Choice	Indicates whether a choice is true/false and its contents
class	Main	Displays and runs the entire quiz generator with methods to create distinct scenes
enum	Topic	A enumeration of topics that the questions can be about.

Class Diagrams

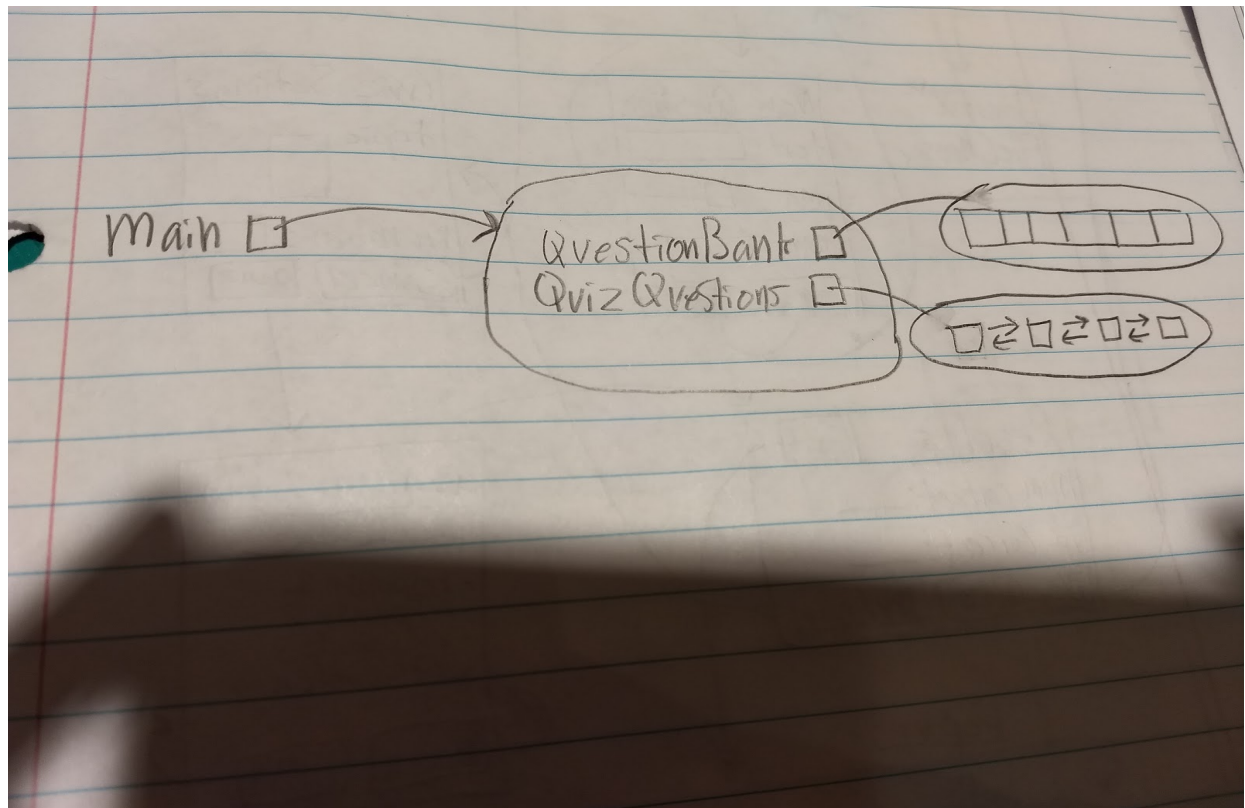
Class Question			
<p>-QuestionText: String. Contains the question contents</p> <p>-Choices: Array of Choice Objects. 4 possible choices</p> <p>-Topic: Topic. Indicating the question topic</p> <p>-CorrectChoice: Choice that is correct</p>			
<p>+Question(String text, Choices[] choices, Topic topic) traverses through the choices array and sets the correct choice variable</p>			
Return Type	Method Name	Parameter List	Description
+Array of Choice objects	getChoices	N/A	Gets array of choices

Class Choice			
<p>-correct: boolean. Each choice will contain whether it is the correct answer or not. Valid Range: T/F</p> <p>-answer: String. Each choice will be associated with an answer.</p>			
Return Type	Method Name	Parameter List	Description
+Choice Object	Choice	String Answer Boolean Correct	Creates choice object with associated answer and whether it is correct

Enum Topic			
Dog breeds, Cat breeds, Quantum mechanics, Roman history, Harry Potter trivia			

Class Main extends Application			
-QuestionBank: ArrayList<Questions>. Contains all the questions of the program -QuizQuestions: LinkedList<Questions>. Contains all the questions for the user created quiz			
Return Type	Method Name	Parameter List	Description
void	main	N/A	Launches the app with argument args
void	init	N/A	Initializes any fields needed.
void	start	Stage	Main driver method that displays GUI and changes the scene based on user events
Parent	genTitleScene	N/A	Builds and returns the root node of the title scene when the program is run.
Parent	genNewQuestionScene	N/A	Builds and returns the root node of the new question scene when “add” button is clicked
Parent	genSettingsScene	N/A	Builds and returns the root node of a scene prompting the user for a quiz topic and number of questions
Parent	genResultsScene	N/A	Builds and returns the root node of a scene displaying the results of the quiz
Parent	genCurrQuestionScene	N/A	Builds and returns the root node of a scene displaying the current question

Object Diagram



GUI Layout Sketch

