

# COMPLETE THE QUIZ APP IN APP INVENTOR

*Estimated time: 45 minutes*

What you will need

- Computer to code on, with wifi
- Phone or tablet to test (or you can use the emulator)

Open the [starter project](#) in the App Inventor Gallery and make your own copy by clicking on "Load into App Inventor".

Here is the existing code:

```
initialize global questionIndex to 0

initialize global questions to make a list
  "What is the name of the largest ocean in the wor..."
  "What is the name of the longest river in the wo..."

initialize global answers to make a list
  "Pacific"
  "Nile"
```

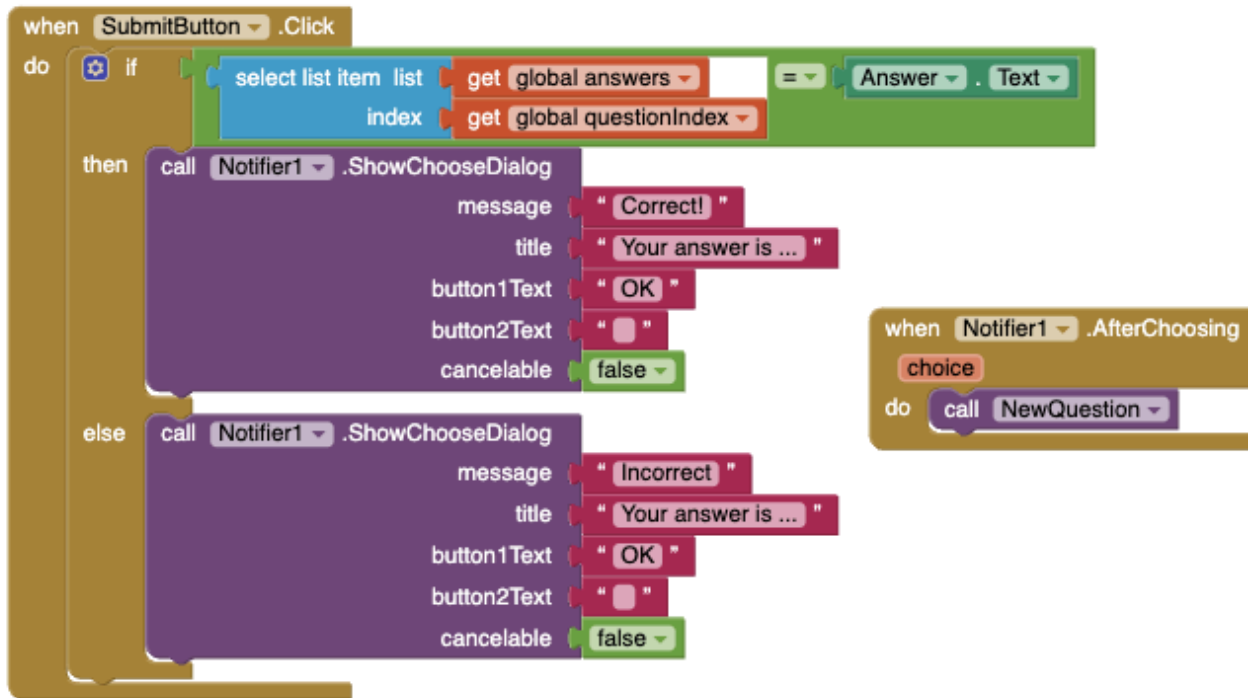
The variables include **questionIndex**, to keep track of the index in the questions and answers lists for the current question and answer. There is a list of **questions** and a list of **answers**. Right now there are just 2 of each. You can test with this list, but eventually you will add 8 more questions to make a 10 question quiz.

```
when StartButton.Click
do
  set VerticalArrangement1.Visible to true
  set StartButton.Visible to false
  call NewQuestion

to NewQuestion
do
  set global questionIndex to random integer from 1 to length of list list get global questions
  set Question.Text to select list item list get global questions index get global questionIndex
  set Answer.Text to ""
```

When the user clicks the StartButton, it will make VerticalArrangement1 visible, so the quiz can begin. The NewQuestion function is called. The NewQuestion function picks a random

number from 1 to the length of the list (2). Then that number is the index to pick a random question from the questions list.



The user types an answer, and presses the SubmitButton. Using an if block, the user's answer is checked to see if it equals the matching answer in the answers list. Then a Notifier is used to tell the user if they are correct or incorrect. ShowChooseDialog displays the message. The Notifier1.AfterChoosing block waits for the user to choose OK before selecting a New Question.

## INSTRUCTIONS

This is a good start, but there is more we need to do to make this a good Quiz App!

1. Don't repeat a question once it's been asked. After the user submits their answer and it is checked for correctness, remove the question from the questions list. Don't forget to remove the corresponding answer from answers so the indexes match up!
2. Now that you are removing questions, you need to check if the list is empty. That means it's the end of the quiz. Add a conditional in NewQuestion to see if the questions list is empty. If it is, set the Notifier message to say the Quiz is over.

3. The user might like to know how many questions they got correct. Add a variable to keep track of the score. When a user's answer is correct, add 1 to the score. When the quiz is over, set the Notifier message to tell the user the quiz is over and what their score is. Hint: use a join block from the Text drawer.
4. Test that all this works with the existing 2 questions and answers. Once you think your app works perfectly, add 8 more questions to the questions list, and add matching answers to the answers list. You can also replace the 2 original questions and answers with your own.
5. **Optional:** You might notice that unless you type the exact answer, the app tells you it is incorrect. For example, if the user types "Pacific Ocean" or "pacific", it thinks it is incorrect. Use some of the Text blocks to make it a little easier to get a "correct" answer. Here are some blocks you might use:

