KUAS
KYOTO UNIVERSITY of ADVANCED SCIENCE
京都発世界人財

京都先端科学大学

Introduction to Design (Track 3)

5.2 Hands-on: Android Quiz App

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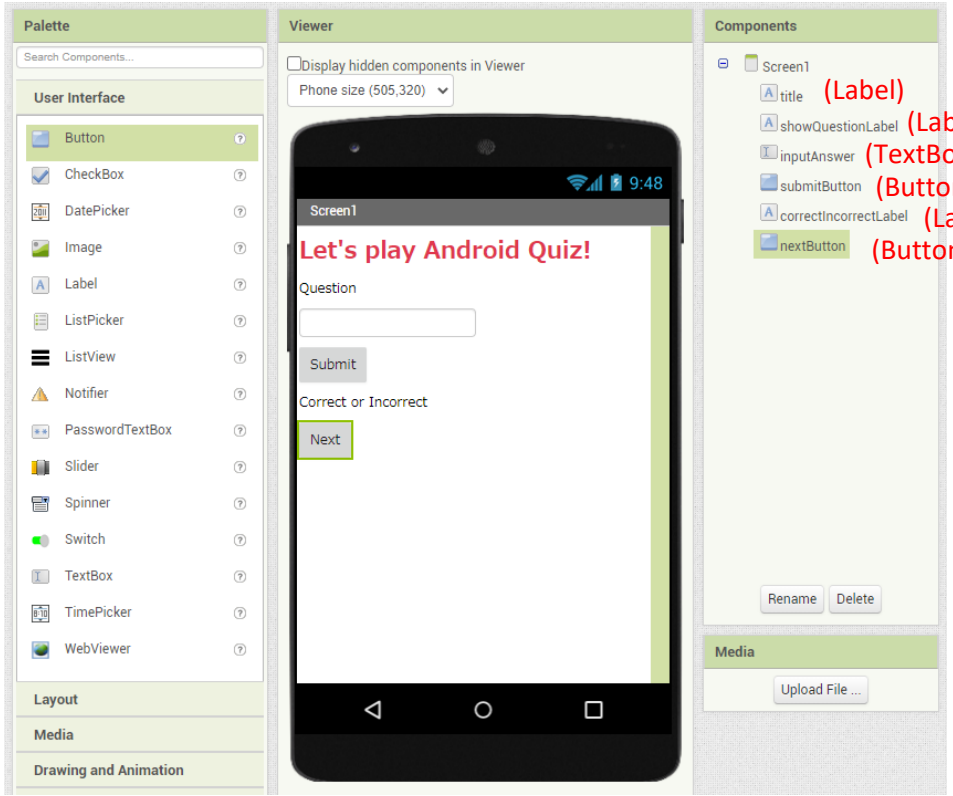
Important!!

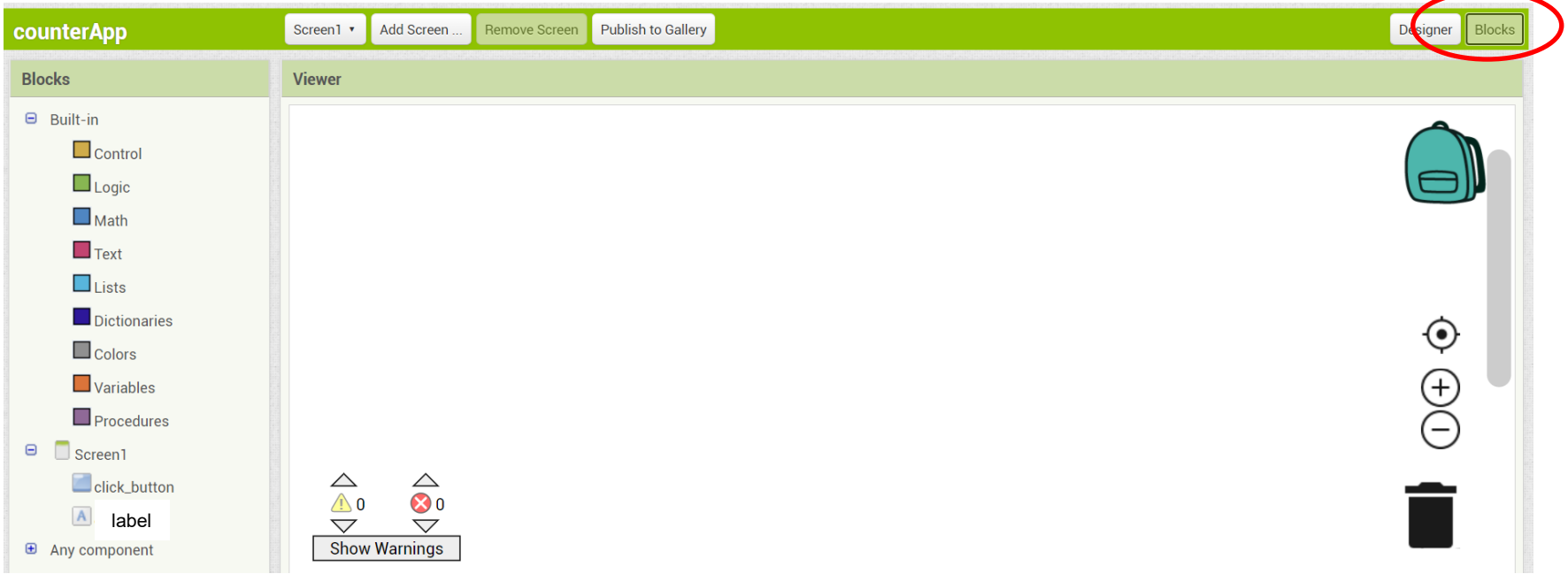
Please disinfectize your hands before entering the classroom!
入室前にアルコールを使用して手指消毒を行ってください。

Please disinfectize your chair and table!
①ペーパーにアルコールを噴霧してください。
②アルコールが噴霧されたペーパーで、使用箇所（テーブル、椅子など）を拭き取ってください。
③使用済のペーパーは廊下のごみ箱に捨ててください。

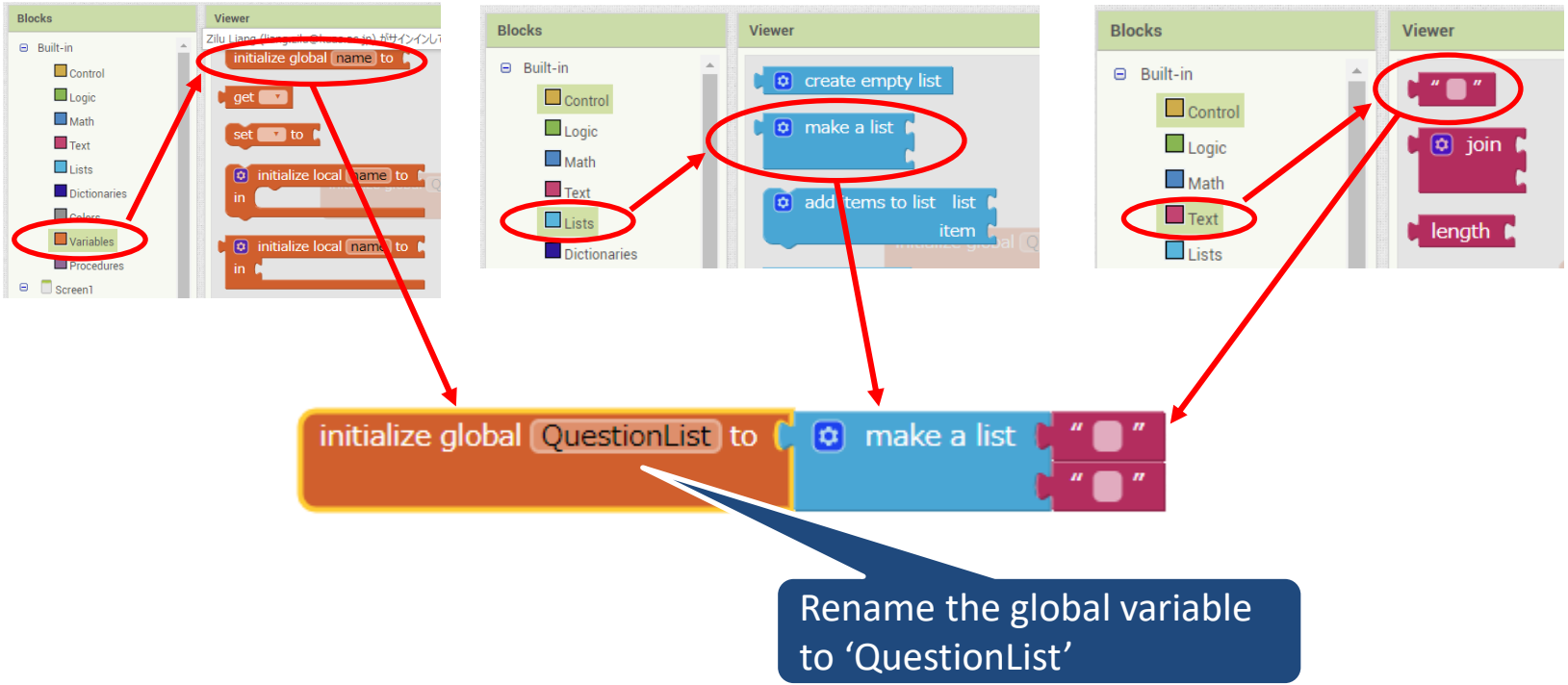
Build UI in designer view



Switch to blocks view

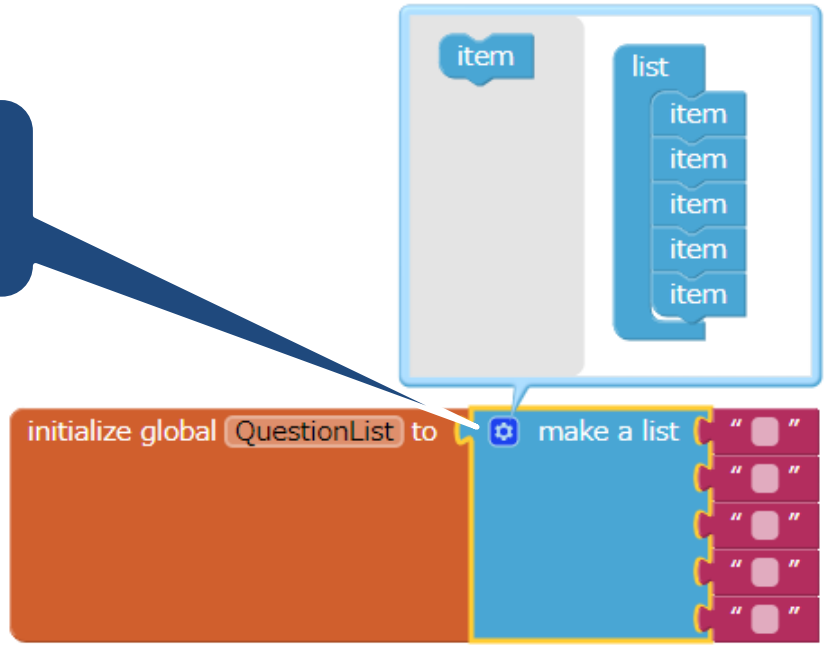


Create Question List

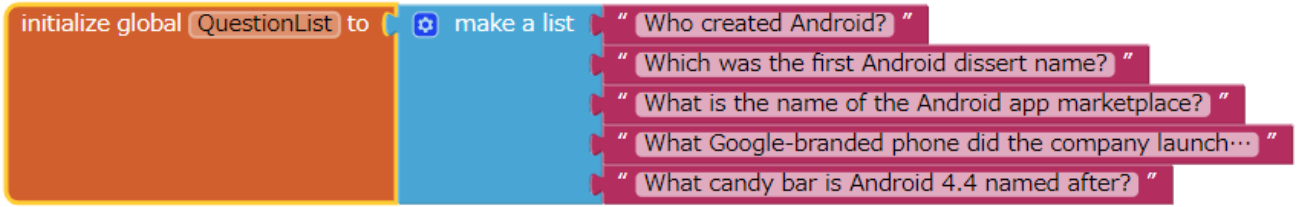


Create Question List

Click the mutator and add more items to the list. We need 5 items.



Create Question List



Question list:

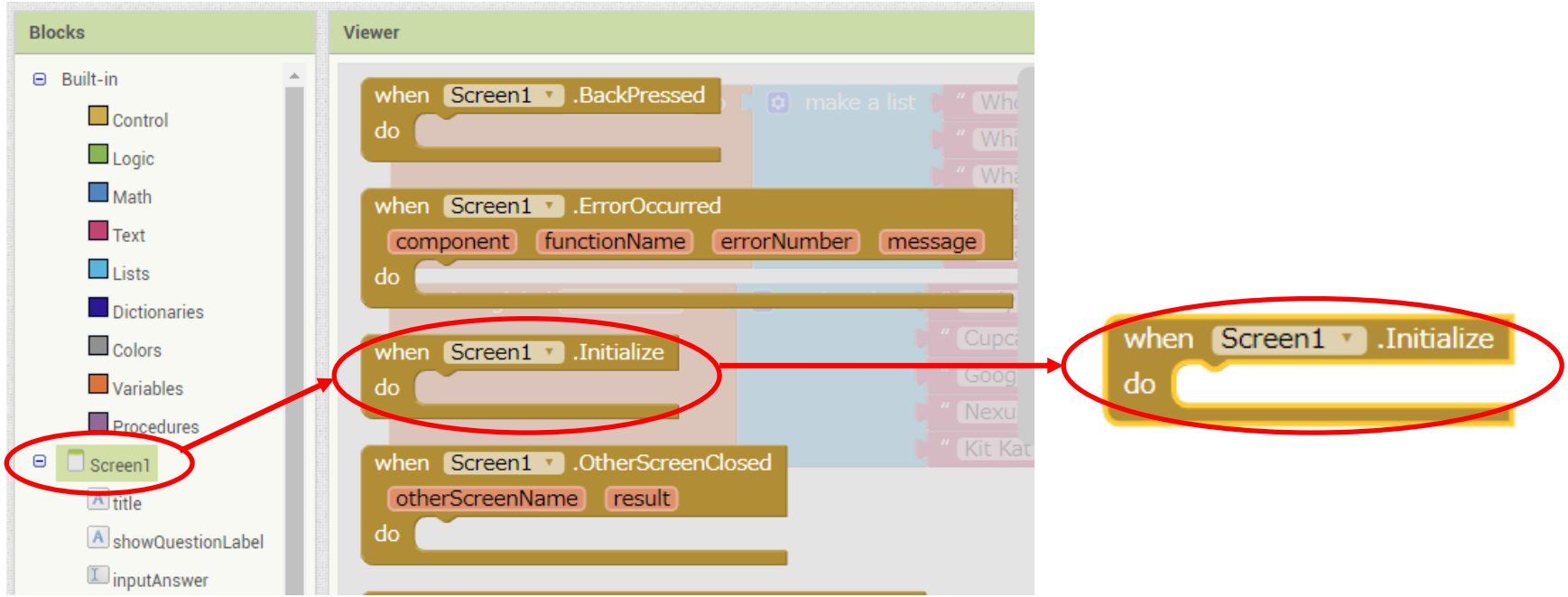
1. Who create Android?
2. Which was the first Android dissert name?
3. What is the name of the Android app marketplace?
4. What Google-branded phone did the company launch in 2013?
5. What candy bar is Android 4.4 named after?

Create Answer List

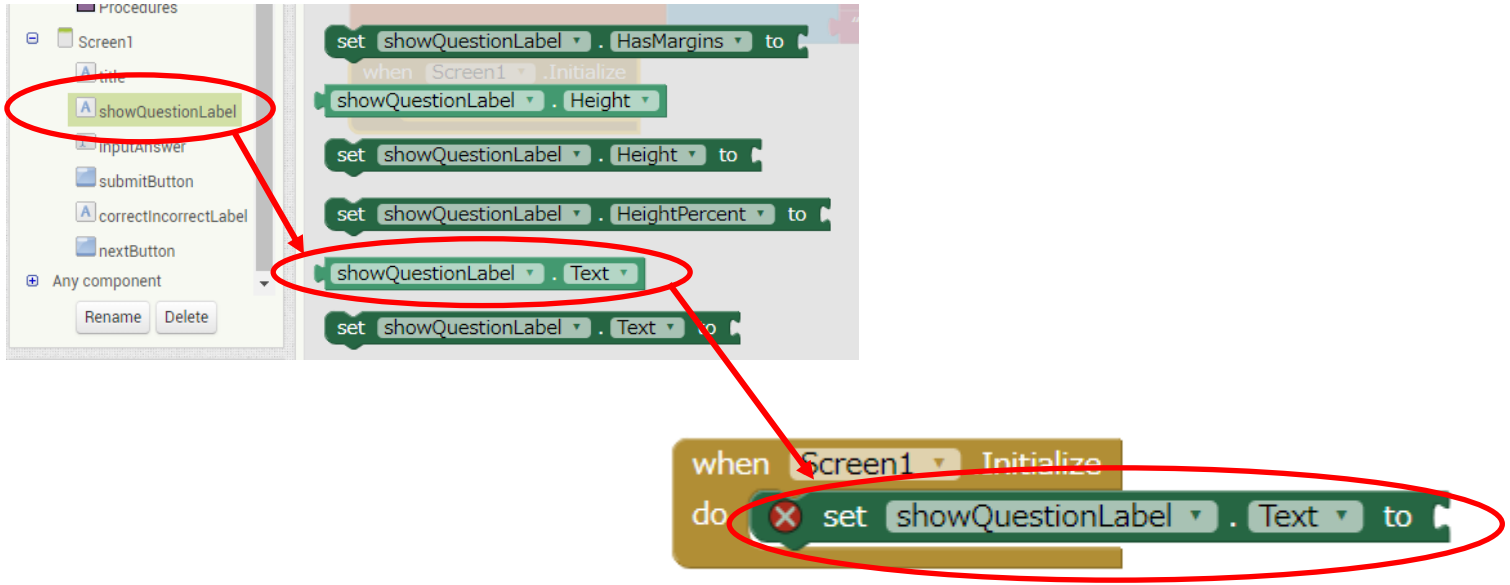
Answer list:

1. Andy Rubin
2. Cupcake
3. Google Play
4. Nexus 5
5. Kit Kat

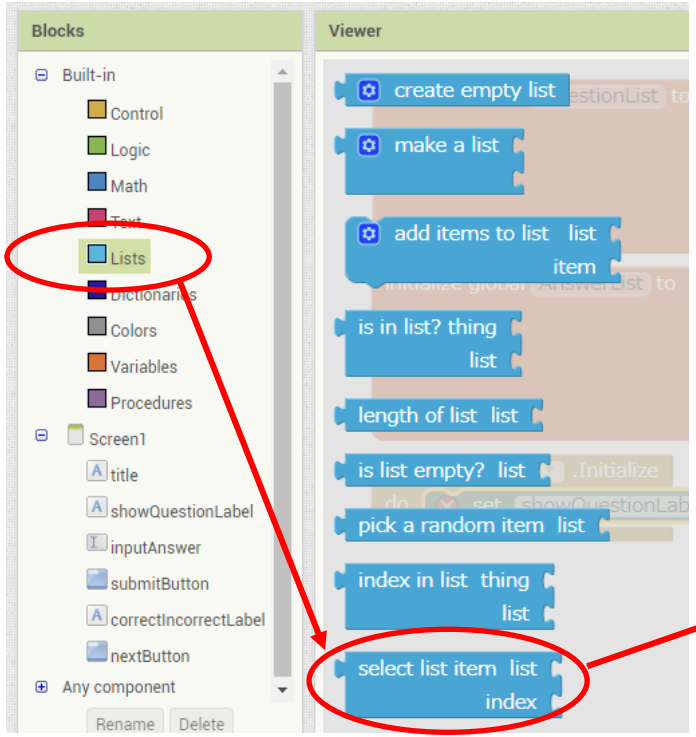
Show question 1 when app starts

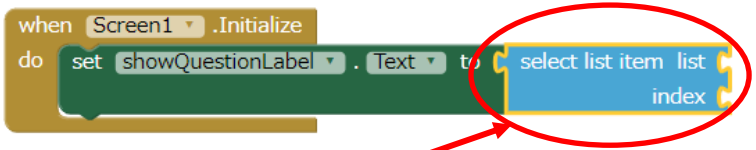


Show question 1 when app starts



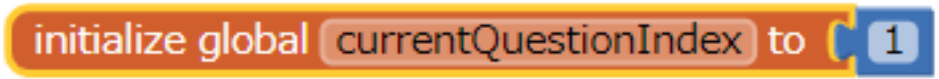
Show question 1 when app starts





Show question 1 when app starts

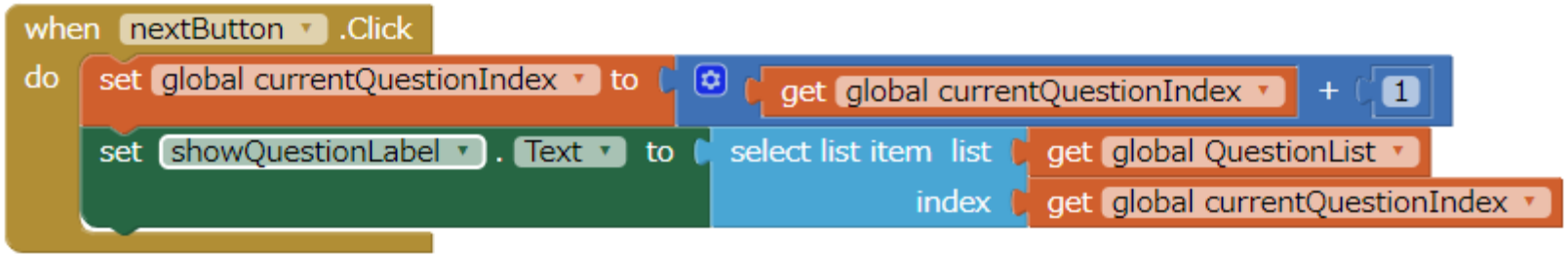
Add Click Handler to ‘Next’ Button



- Why do we need this ‘currentQuestionIndex’ variable
- Can you draw a flowchart of the logic of the click handler?

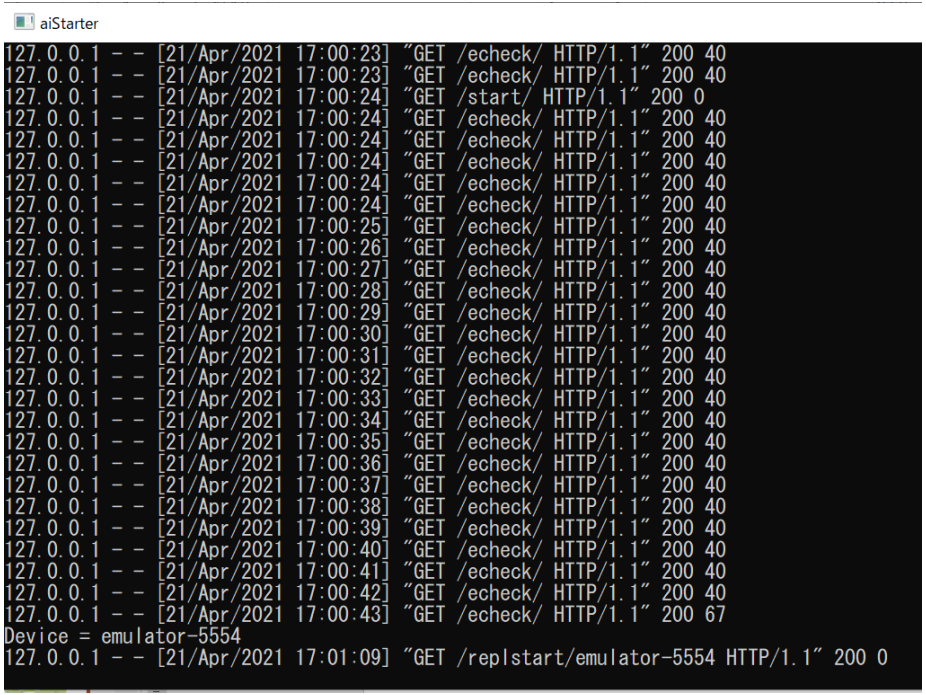
Add Click Handler to ‘Next’ Button

Add Click Handler to ‘Next’ Button

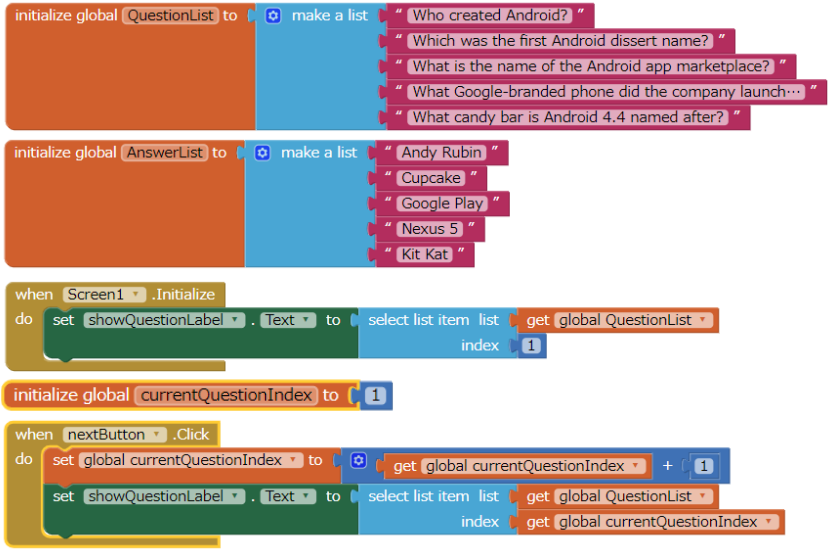


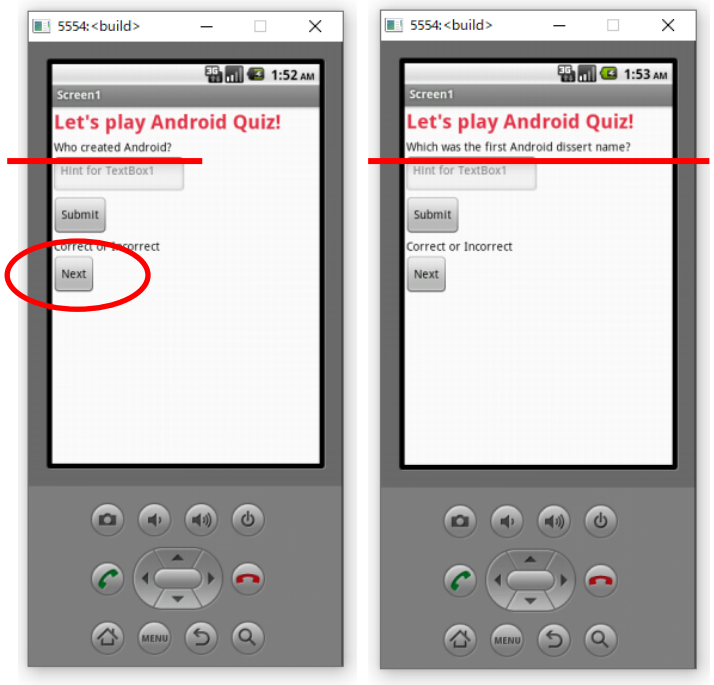
Test App on Emulator

Click on the aiStarter on your computer, you should see the following window open.



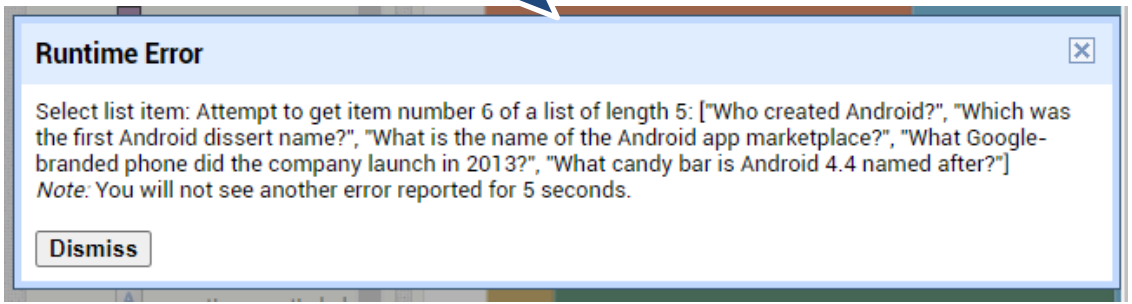
Test App on Emulator





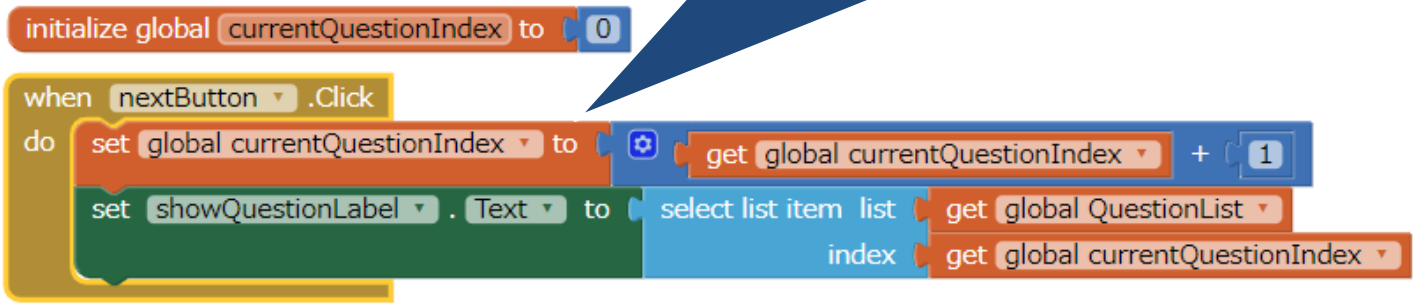
Error

If we click ‘Next’ after the last question, we’ll get an error. This is because we are trying to get an item with index number 6 from the list, but there are only 5 items in the list!



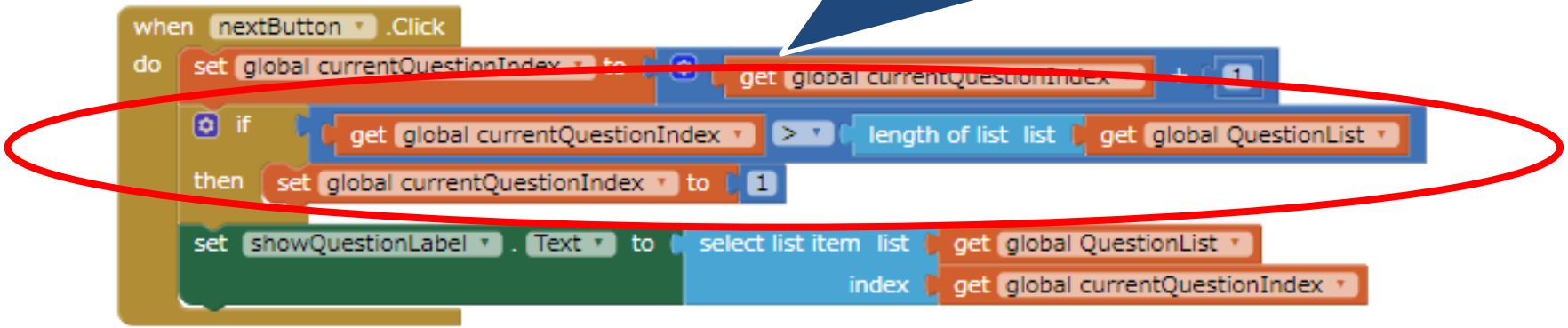
Fix the Error

We need to check if the ‘currentQuestionIndex’ is larger than the length of the list

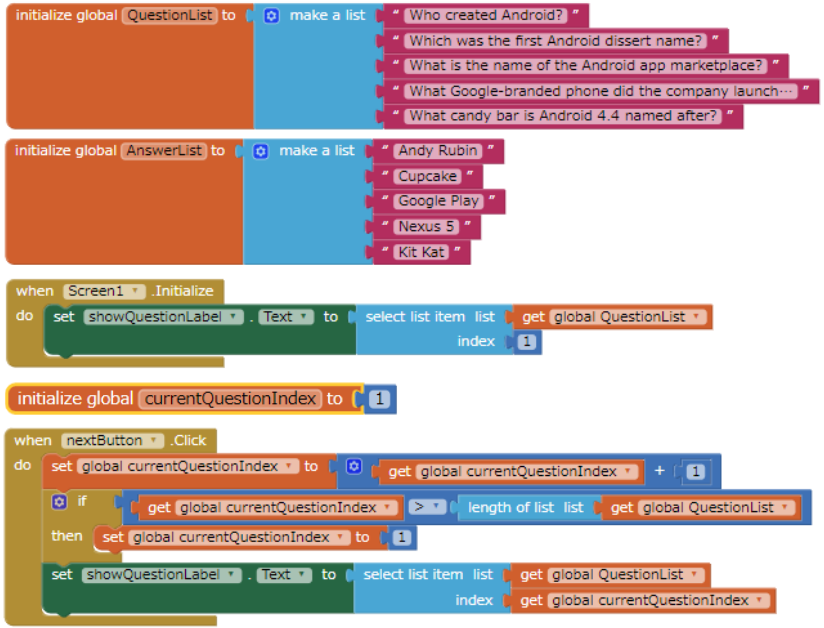


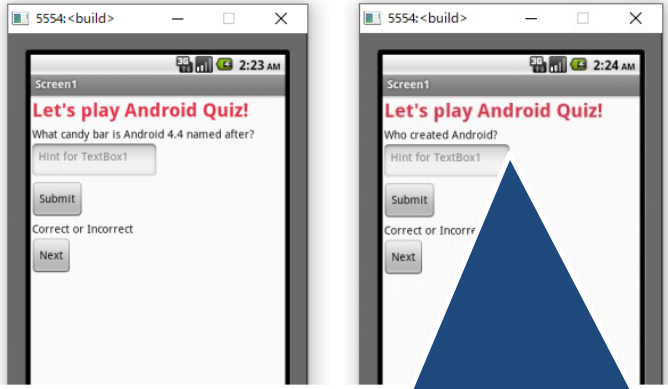
Fix the Error

- We need to check if the ‘currentQuestionIndex’ is larger than the length of the list
- If ‘currentQuestionIndex’ is larger than list length, then reset it to 1



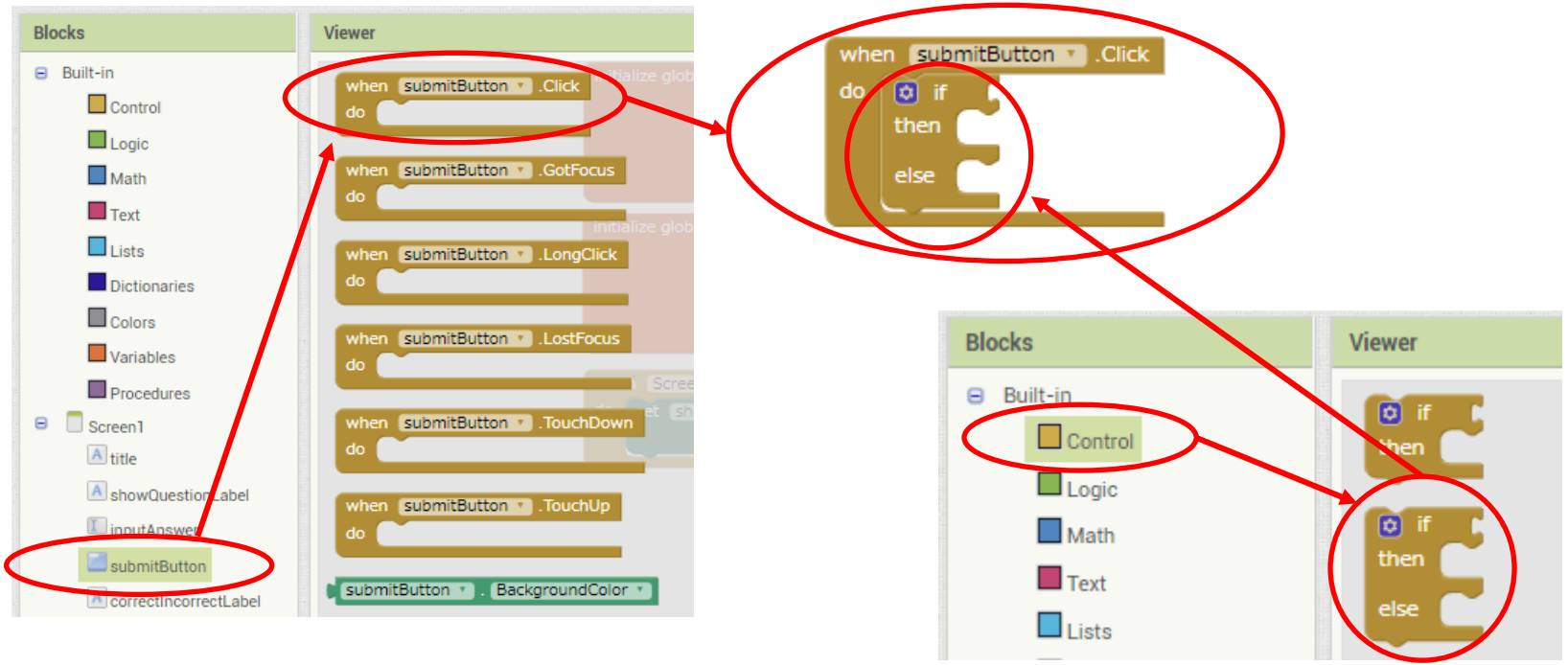
Test App on Emulator



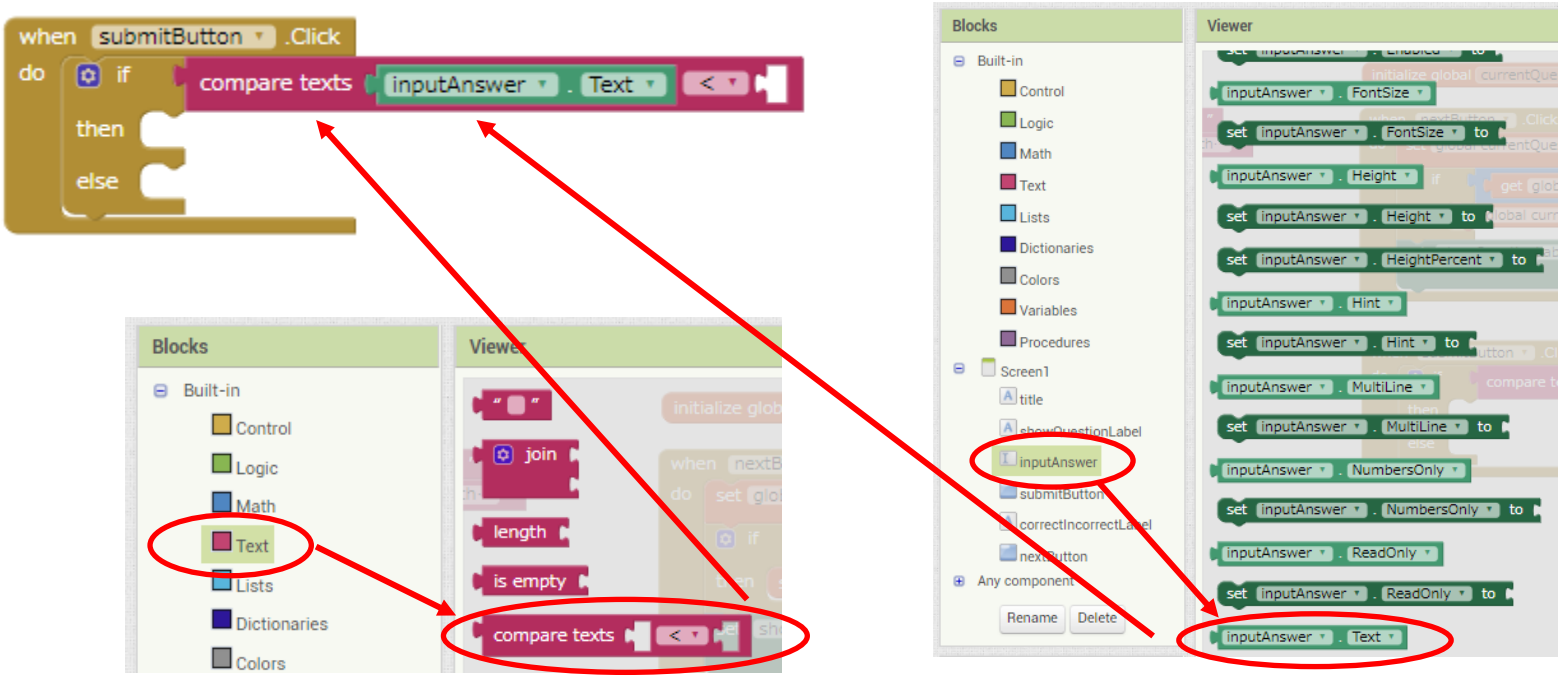


Now if we click ‘Next’ after the last question, the index will be reset to 1 and the first question will be shown

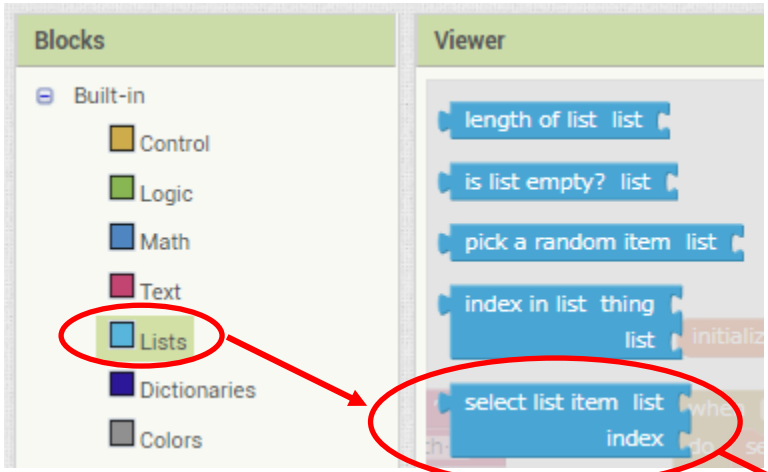
Add Click Handler to ‘Submit’ Button

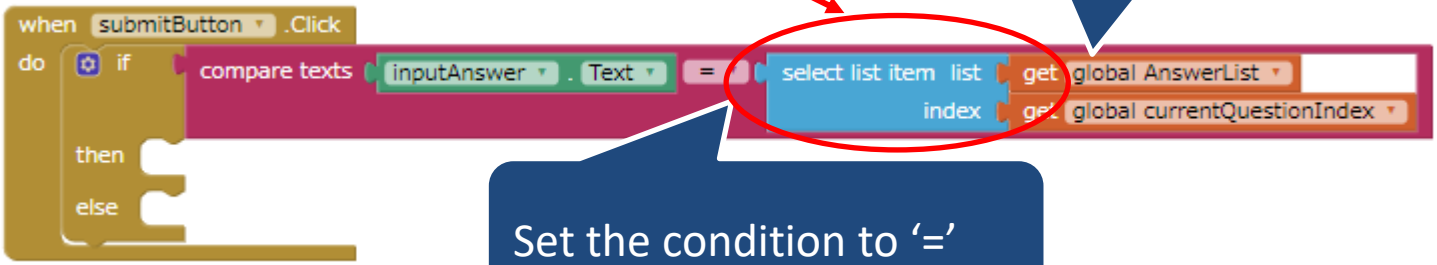


Add Click Handler to ‘Submit’ Button



Add Click Handler to ‘Submit’ Button

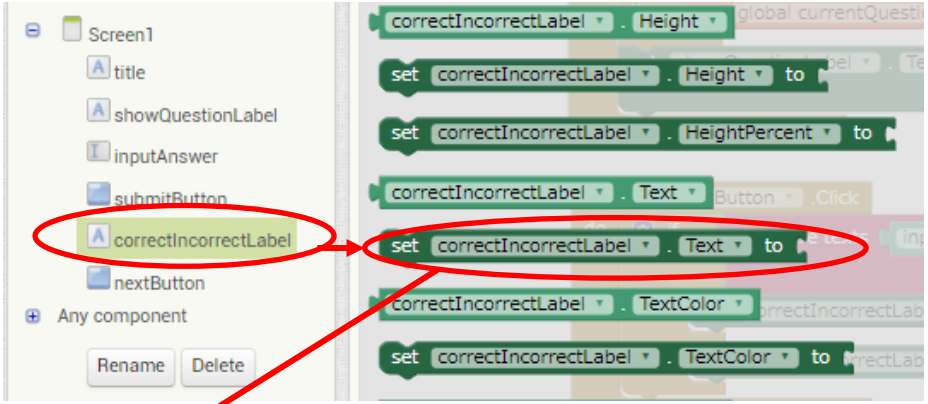


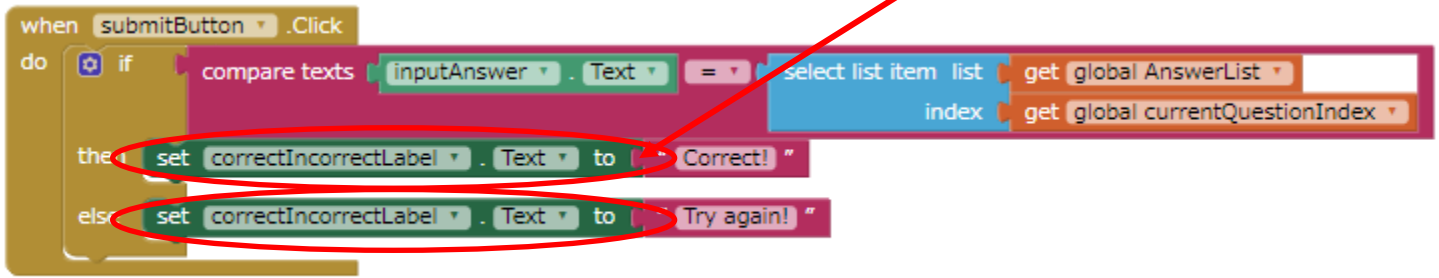


- Set list to ‘AnswerList’
- Set index to ‘currentQuestionIndex’

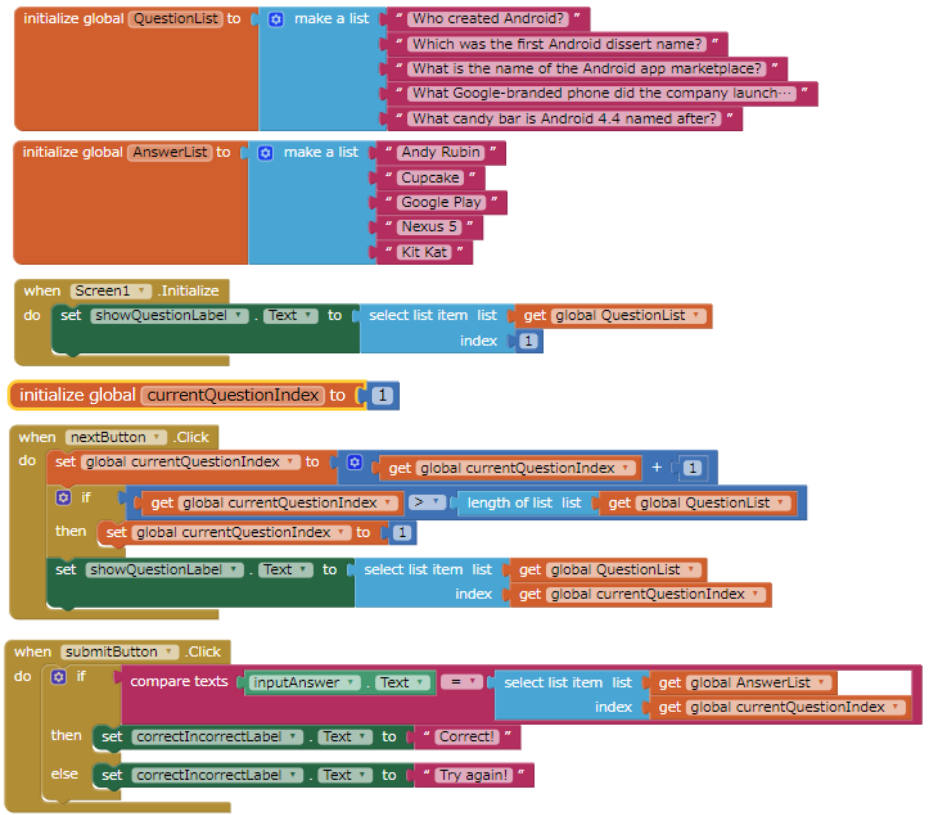
Set the condition to ‘=’

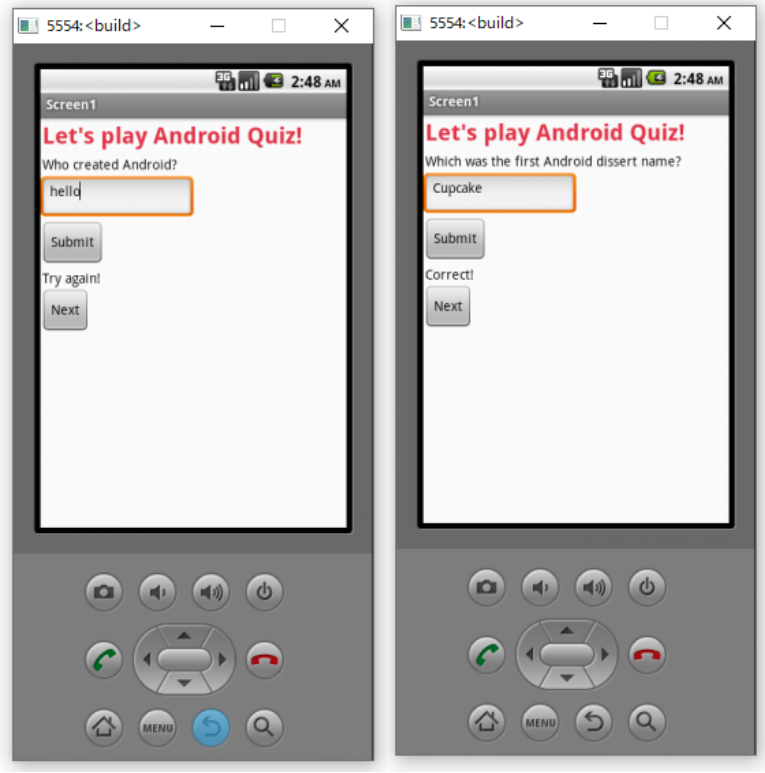
Add Click Handler to ‘Submit’ Button



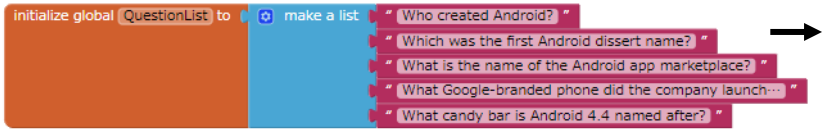


Test App on Emulator

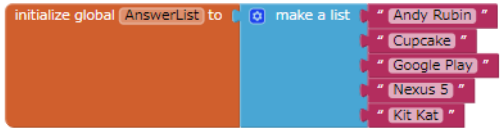




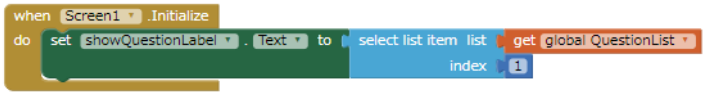
Code Anatomy: Android Quiz App



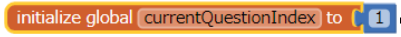
→ Initialize a global variable with five questions



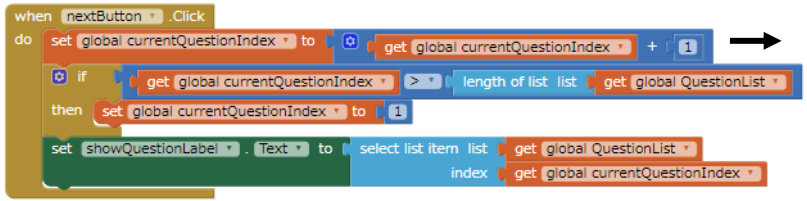
→ Initialize a global variable with the corresponding answers



→ Show the first question when app starts

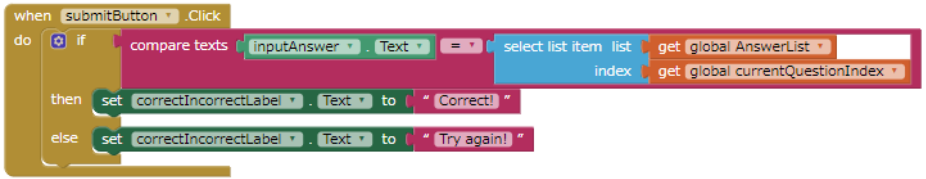


→ Initialize a global variable to store the index of the current question



→ If 'Next' button is clicked, increase the index by 1

→ If it's larger than the length of the question list, reset it to 1.



→ Get user's answer and compare with the correct answer

Assignment

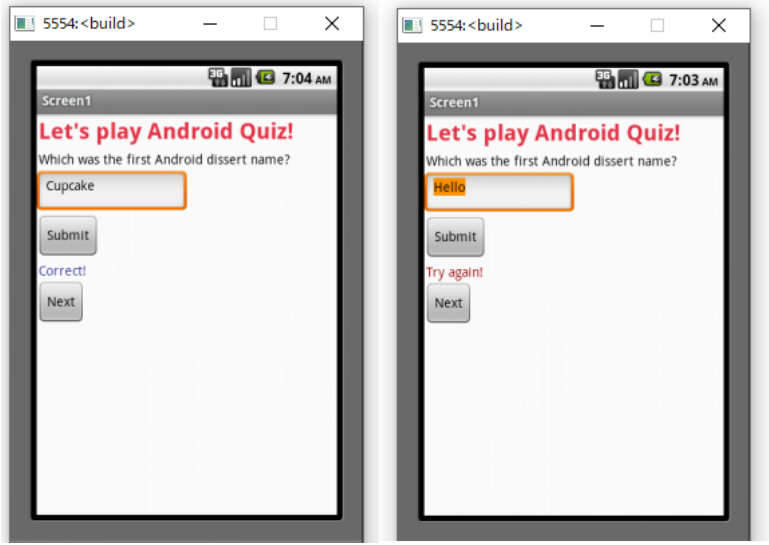
5.1 Complete the hands-on tasks in the tutorial

- ✓ If you finish all the steps in class, show your Android Quiz App to one of the instructors before you leave
- ✓ If you cannot finish all the steps, you can work on them after class and show your app to one of the instructors in the class next week

Assignment (Optional)

If you have time, why not challenging these advanced tasks?

- 5.2 Add more questions and answers to the pool. E.g., Who Dream of Electric Sheep? What is the Answer to the Ultimate Question of Life, the Universe, and Everything?
- 5.3 When user's answer is correct, show the message 'Correct!' in blue color; when user's answer is incorrect, show the message 'Try again!' in red color.
- 5.4 Remove the text in 'inputAnswer' and 'correctIncorrectLabel' from last answer when user click the 'Next' button.

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