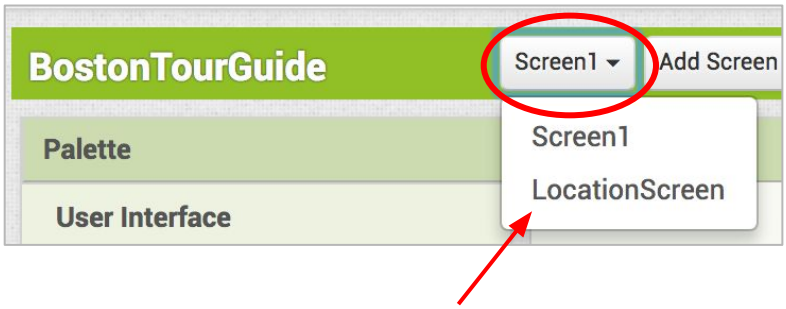
MALDEN TOUR GUIDE: LOCATION SCREEN

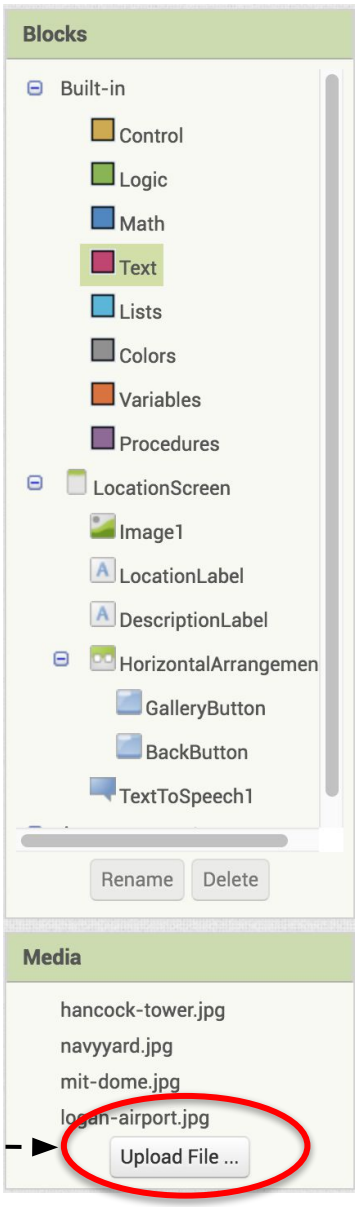
CODING THE LOCATION SCREEN

1 Switch back to the **LocationScreen**.



Let's start by uploading the images you've selected for your four landmarks.

2 Click on "**Upload File**" under Media, and upload your four image files.



VARIABLES

We need to store all the information for our landmarks in our app.

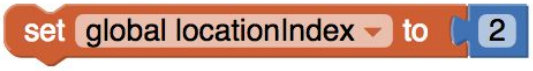
We can do that with variables. Variables are a way to store information by giving it a name, and referencing the name in our code. We can also change the value of a variable if we need to.

The Variables drawer holds the blocks used for variables.

To use a variable, you must first initialize it.

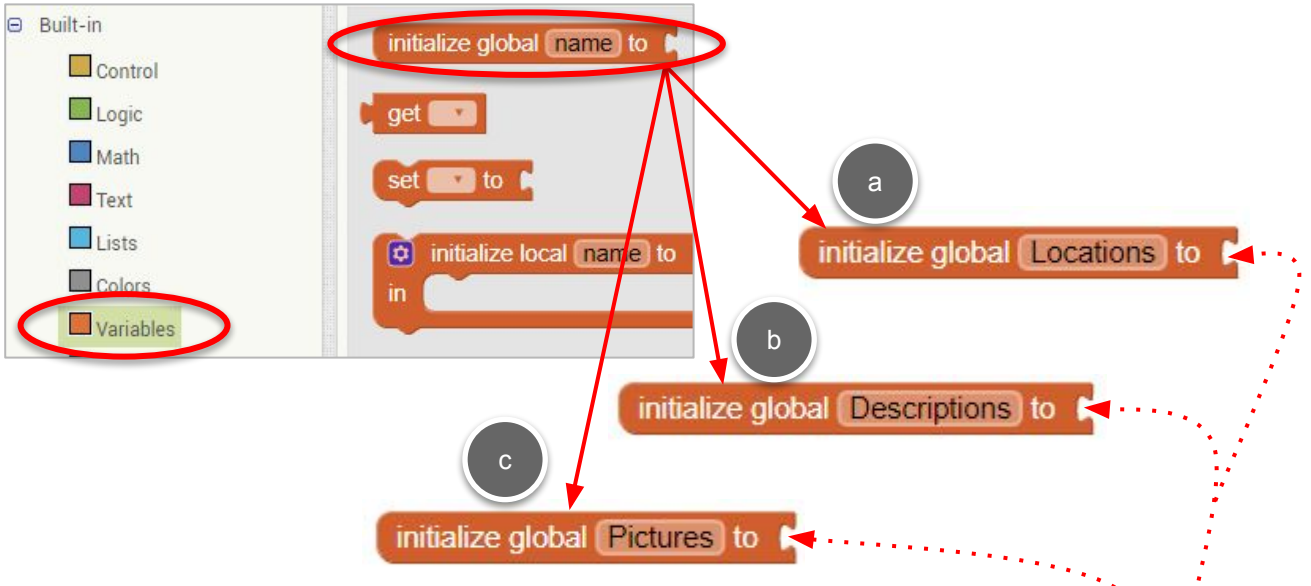
You can get the value of a variable.

You can also set (change) the value of a variable within your app.

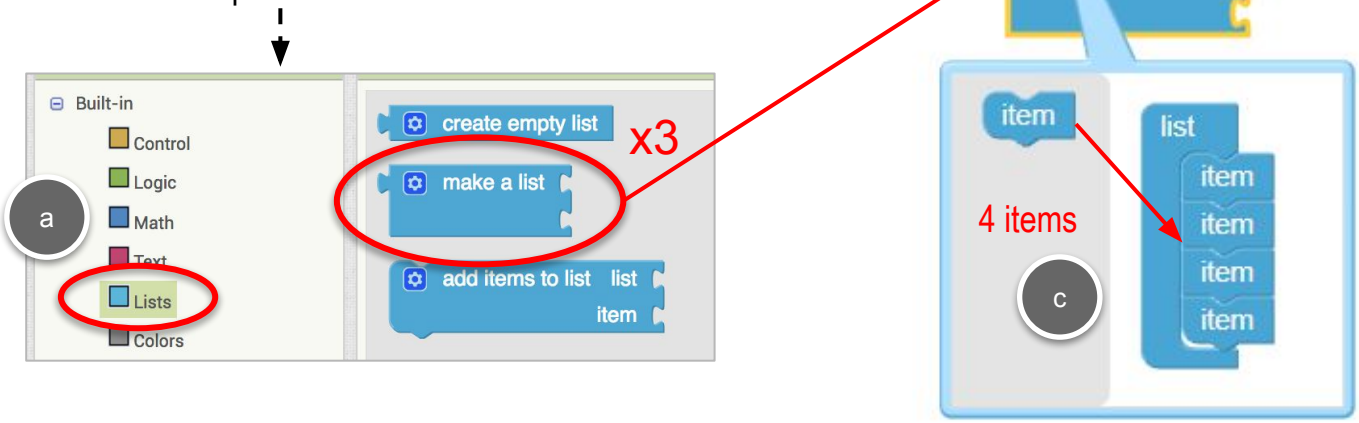


CODING THE LOCATION SCREEN

3 Make three new variables, and name them **Locations**, **Descriptions**, and **Pictures**.

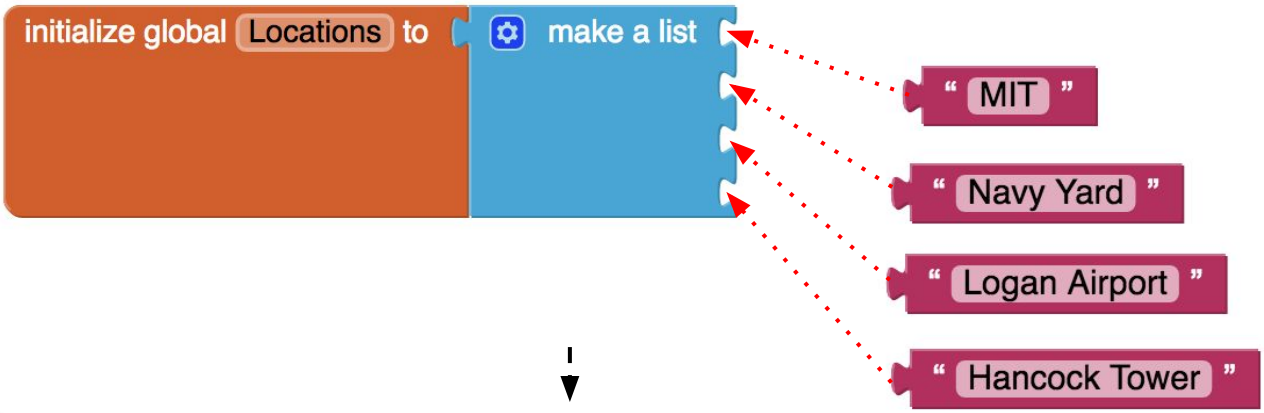


4 Drag out 3 **make a list** blocks from the Lists drawer. Add items so they are each 4 elements long, and snap them into the 3 variables.

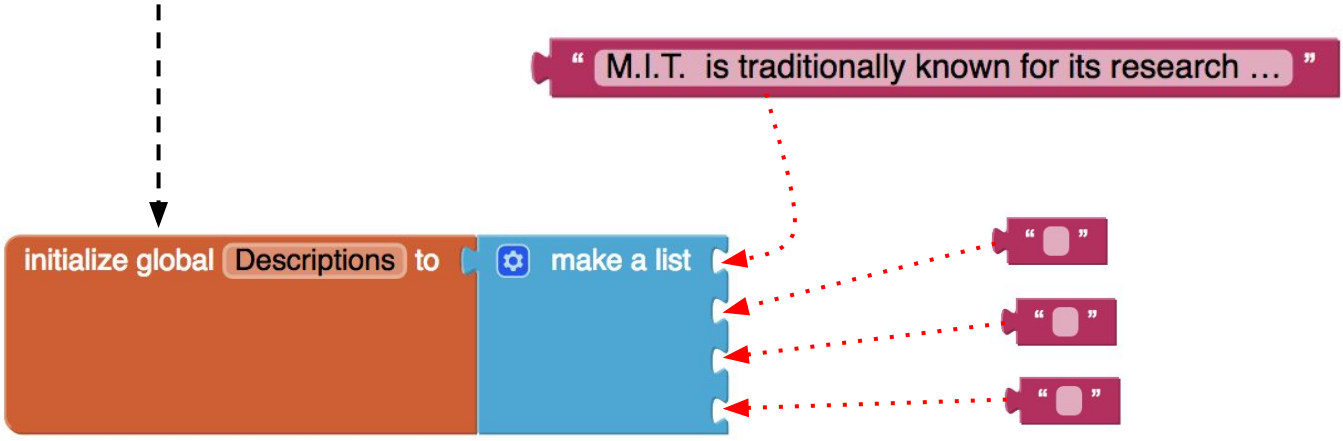


LET'S CONTINUE

5 To **Locations**, add 4 **text** blocks with the names of your four landmarks. These should match exactly the names you used as **startValue** in **Screen1**.

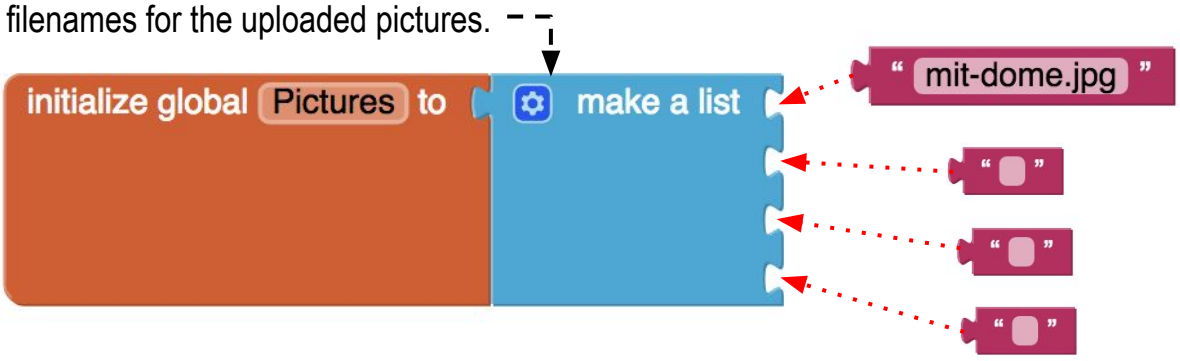


6 Add text descriptions (the longer descriptions from the Landmarks worksheet) for your four landmarks to the **Descriptions** list, making sure they are in the same order as the **Locations**!



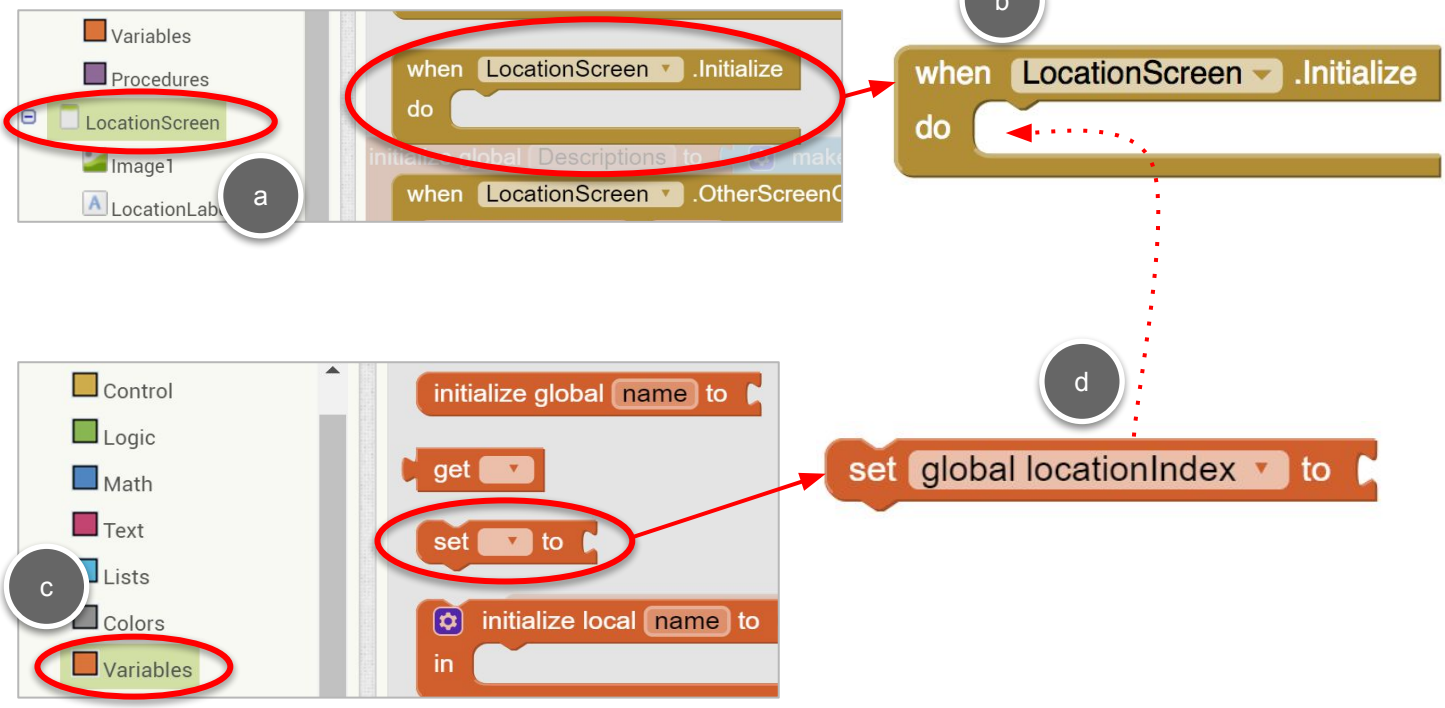
LET'S CONTINUE

7 And to **Pictures**, add **text** blocks that contain the exact filenames for the uploaded pictures.



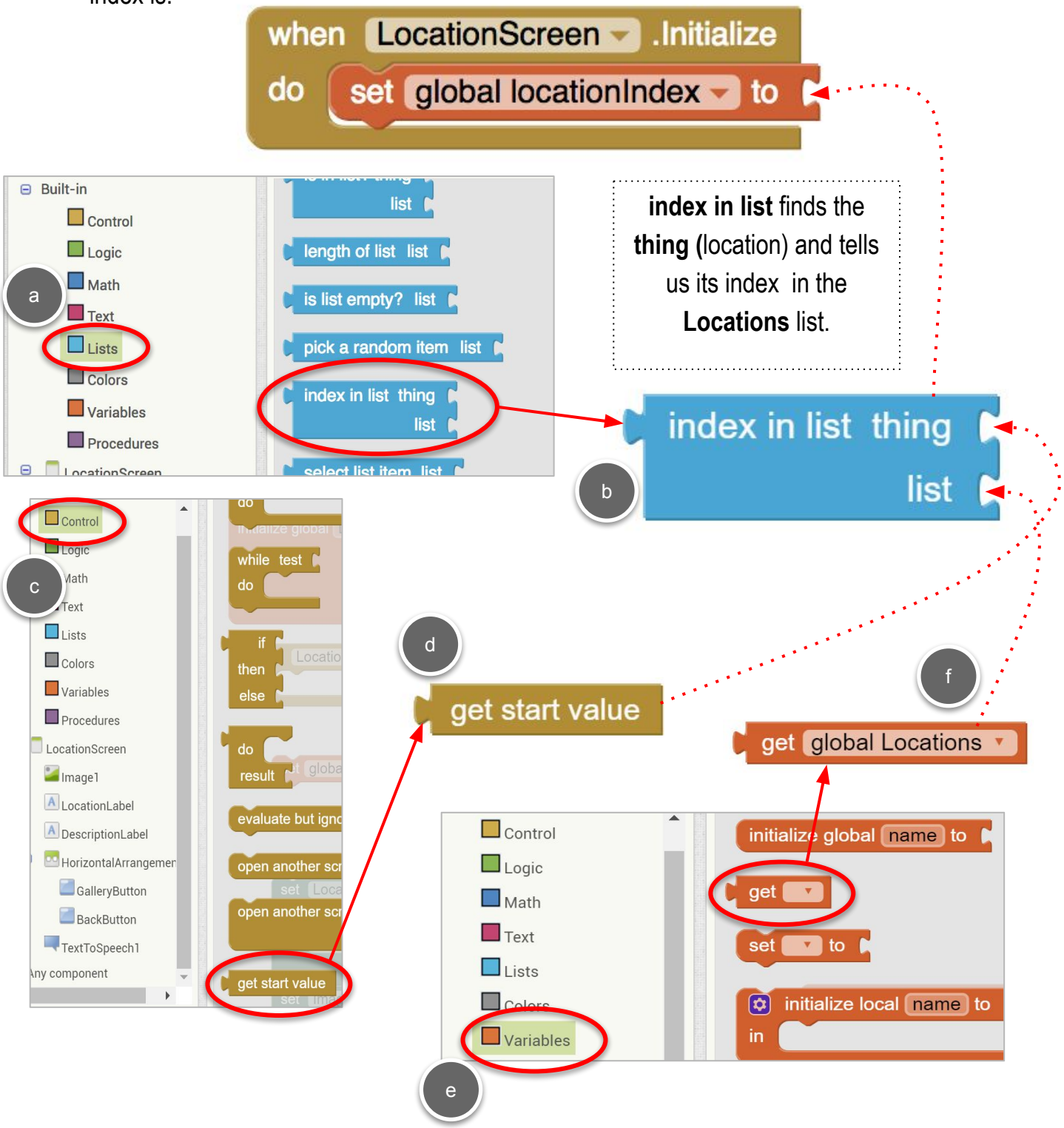
8 Let's make a new variable, **locationIndex**, to keep track of which Location we want to display. Initialize it to 0.

9 Set the value of **locationIndex** in **LocationScreen.Initialize** event, the event is triggered when the screen first opens.



LET'S CONTINUE

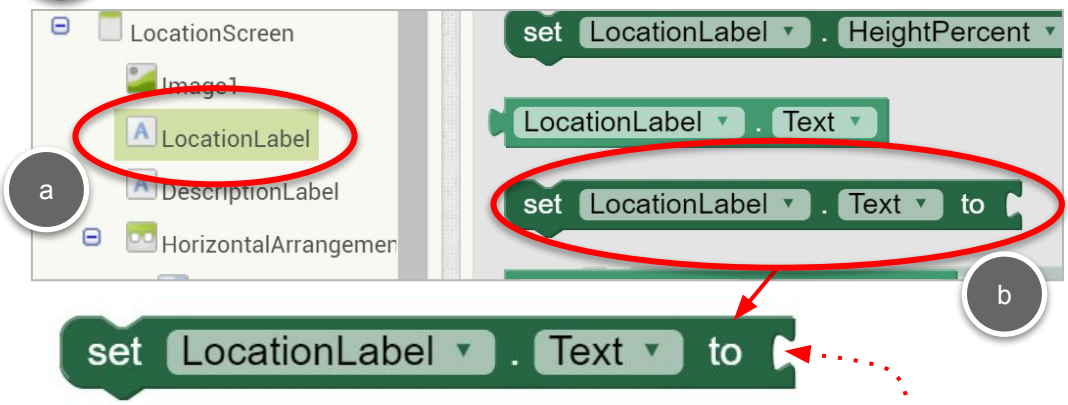
10 Set the value of **locationIndex** based on the **start value** passed from **Screen1**. Look for the location passed in start value in the **Locations** list, and set **locationIndex** to whatever that index is.



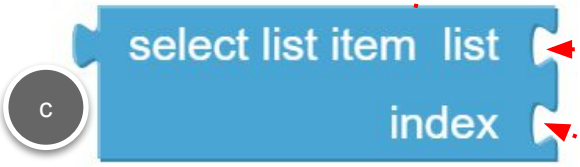
LET'S CONTINUE

Now we use **locationIndex** to point to the correct Location, Description, and Picture items in our three lists!

11 Start with the **set LocationLabel.Text** block, snapping it in below **set global locationIndex**.



select list item pulls out an item from a list, when you tell it the index.

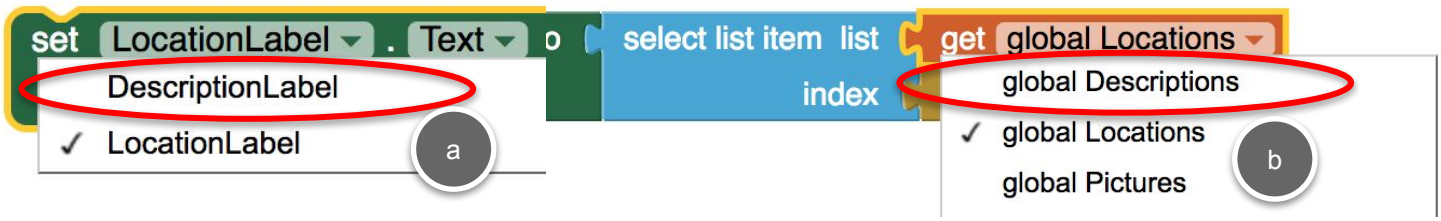


Let's do the same for the **Description**. Let's make it easier by duplicating the block we just made.

12 Right-click on the **set LocationLabel.Text** block and **Duplicate** it.

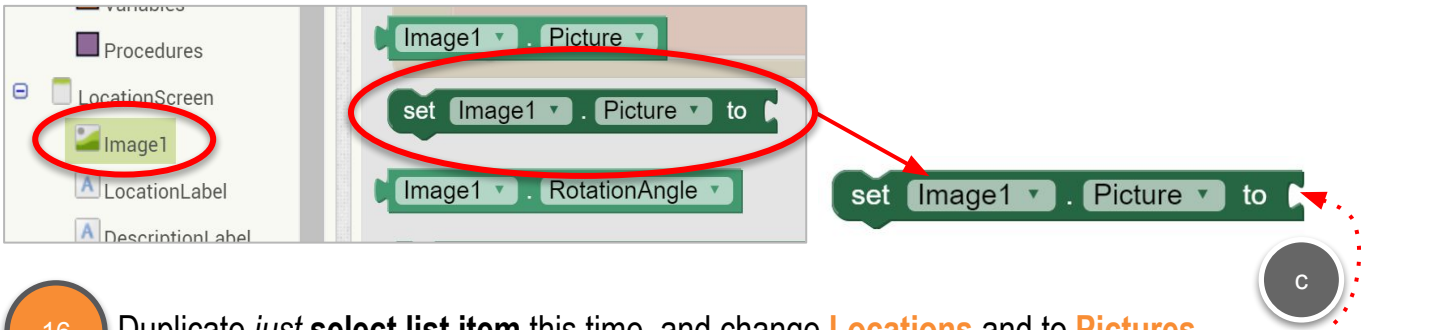
LET'S CONTINUE

13 Change **LocationLabel** to **DescriptionLabel,** and **Locations** to **Descriptions**.

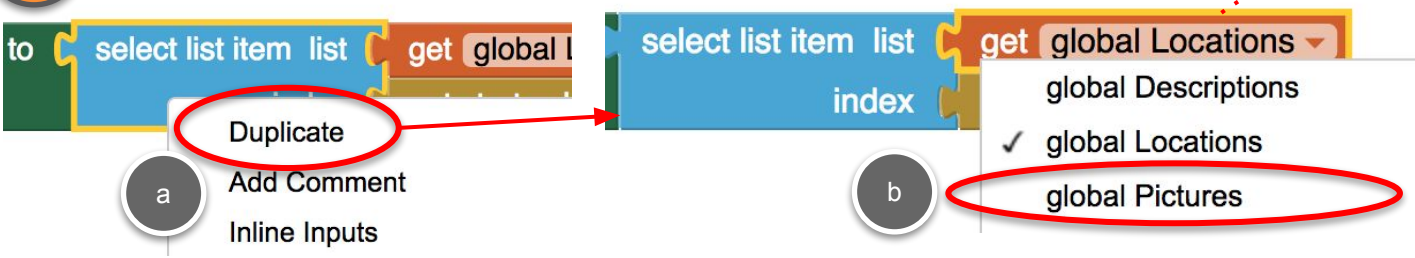


14 And snap it into **LocationScreen.Initialize** event, below **set LocationLabel.Text**.

15 Let's also set the **Image.Picture** to the correct PIcture.
We can't Duplicate the entire block so dragout out **set Image1.Picture.**



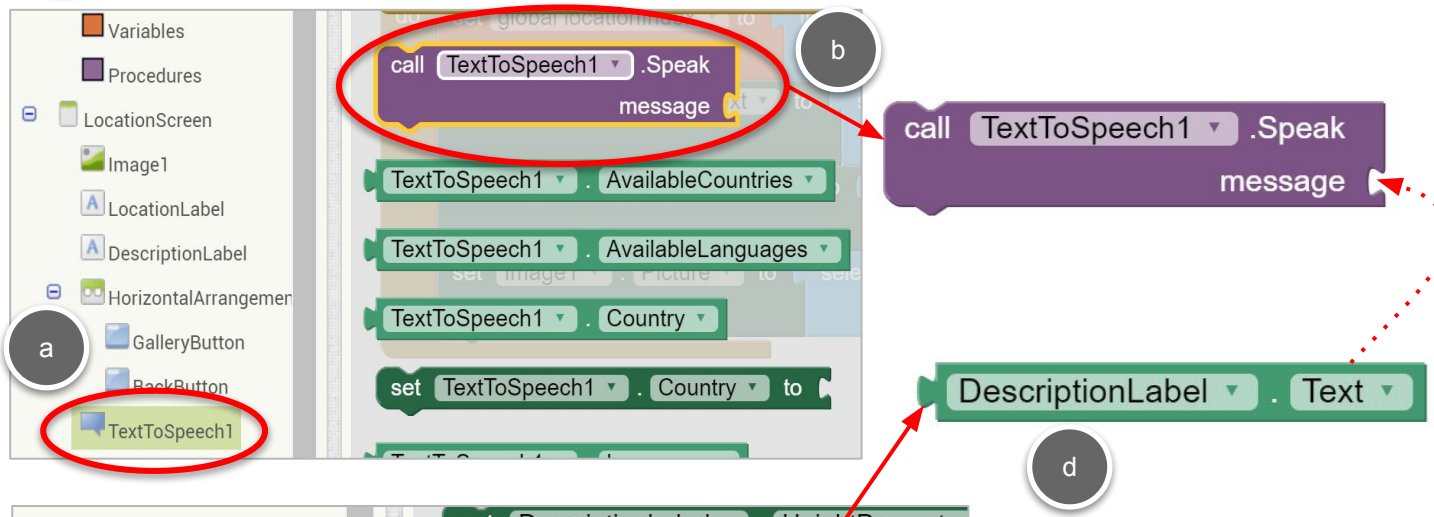
16 Duplicate *just* **select list item** this time, and change **Locations** and to **Pictures**.



17 And snap the block into **LocationScreen.Initialize** event, below **set DescriptionLabel.Text**.

LET'S CONTINUE

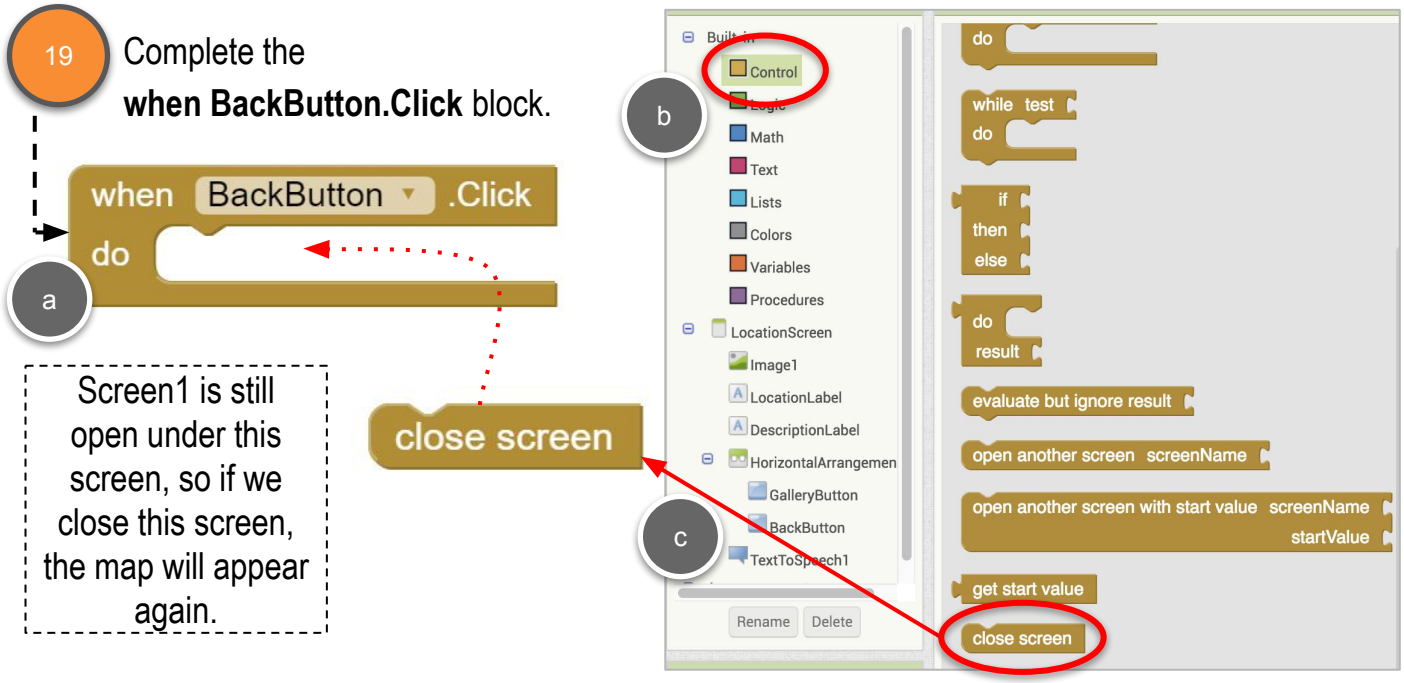
18 Let's use the **TextToSpeech** component to have the app "speak" the description..



e And snap it in to **LocationScreen.Initialize** event, below **set Image1.Picture.**

One more button and we're finished with this screen!

19 Complete the **when BackButton.Click** block.



Screen1 is still open under this screen, so if we close this screen, the map will appear again.

TESTING

20 Test your app with the MIT AI2 companion.

- Long click on each of your markers and see that the **LocationScreen** opens, displays the correct description and picture, and the correct description is read aloud.
- Try the **Back to Maps** button to make sure you can go back and forth between the first two screens.