

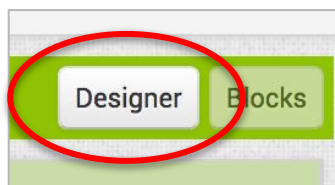
TOUR GUIDE: GALLERY SCREEN

GALLERY SCREEN



The GalleryScreen will allow users to take pictures of the sites to add to a Gallery!

- 1 Go to the "GalleryScreen".
- 2 Switch to the Designer.
- 3 With your partner, look at the user interface and see if you can identify what each component does. See the screen layout below.



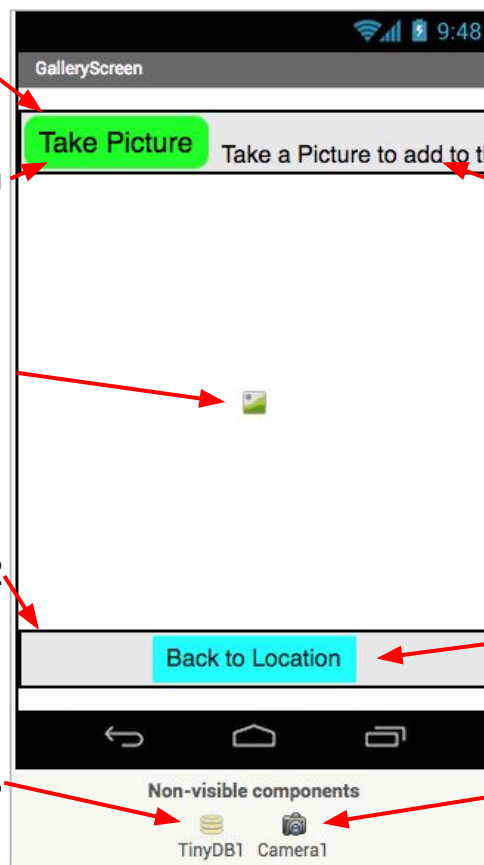
HorizontalArrangement1

CameraButton

Image1

HorizontalArrangement2

TinyDB



InstructionLabel

BackButton

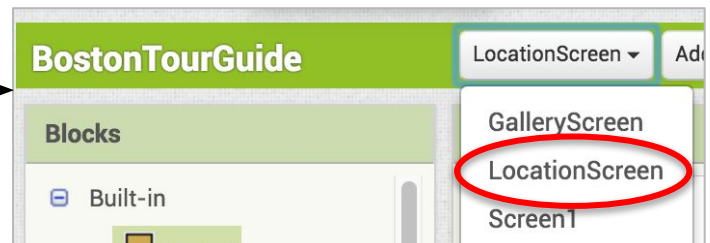
Camera

GALLERY BUTTON

Now go back to **LocationScreen** and add the button and code to open the **GalleryScreen**.

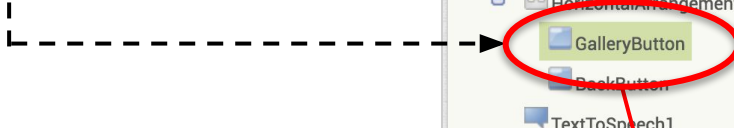
4

Go back to the “**LocationScreen**”. - - - - -



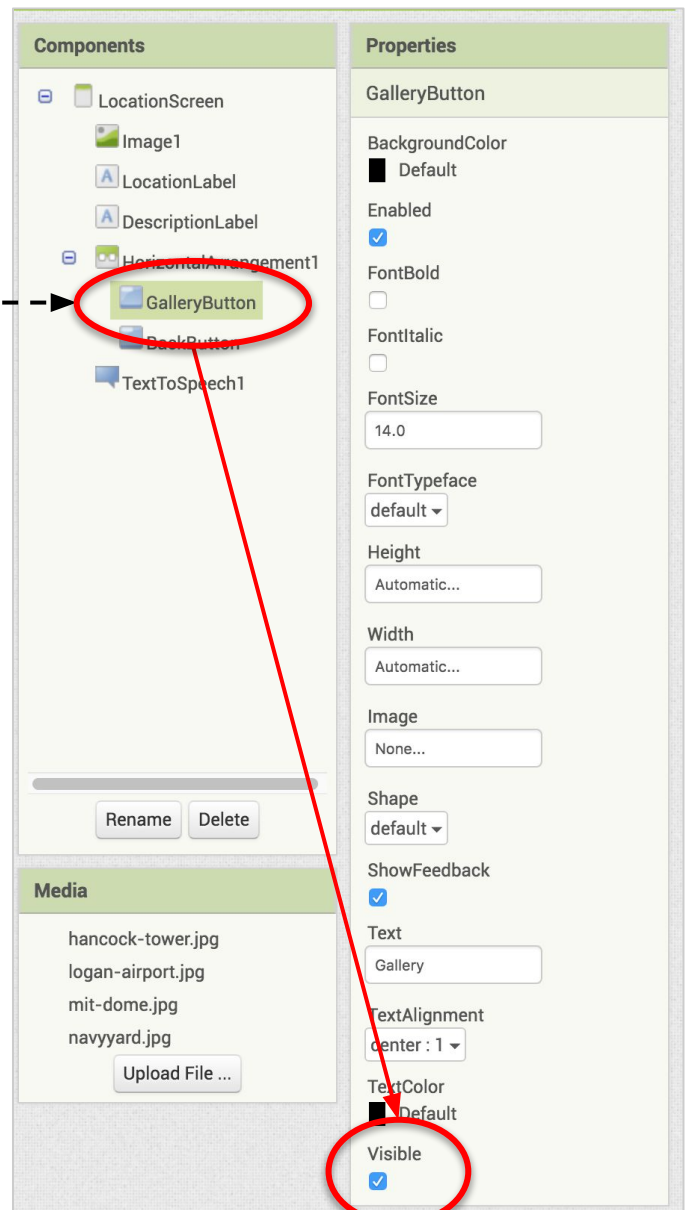
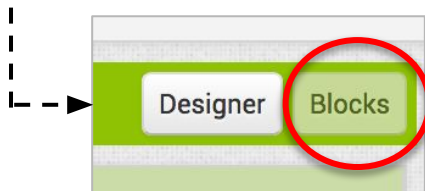
5

Select **GalleryButton** in the Components panel, and click on the *Visible* checkbox to make it visible.



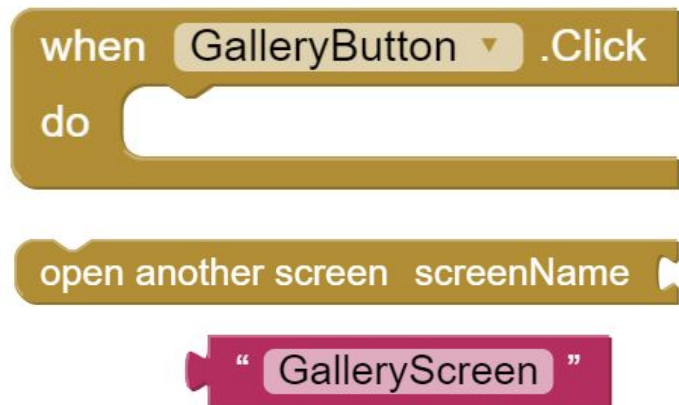
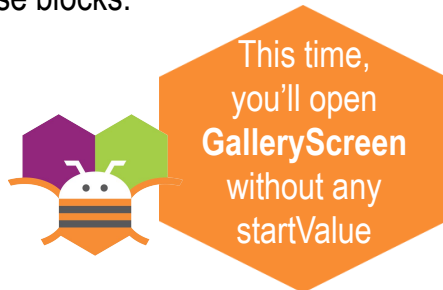
6

Switch to the Blocks Editor.

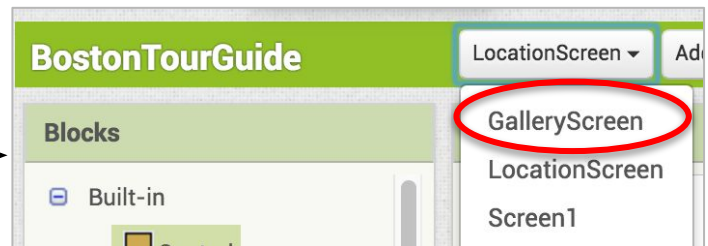


GALLERY BUTTON

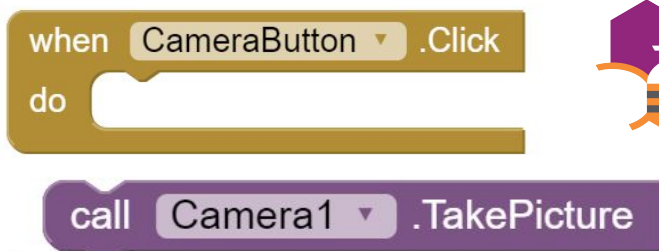
- 7 Open the **GalleryScreen** when **GalleryButton** is clicked.
Use these blocks.



- 8 Now, go back to the **GalleryScreen**.



- 9 When the user clicks **CameraButton**, have the **Camera** component take a picture.



- 10 When a picture is taken, the **Camera.AfterPicture** event is triggered. Set the **Image1.Picture** to the image returned by the **Camera**. Use these blocks.



TEST THE APP

11

Test the Camera feature with the MIT AI2 Companion.

- Take a picture, and see that the image changes.



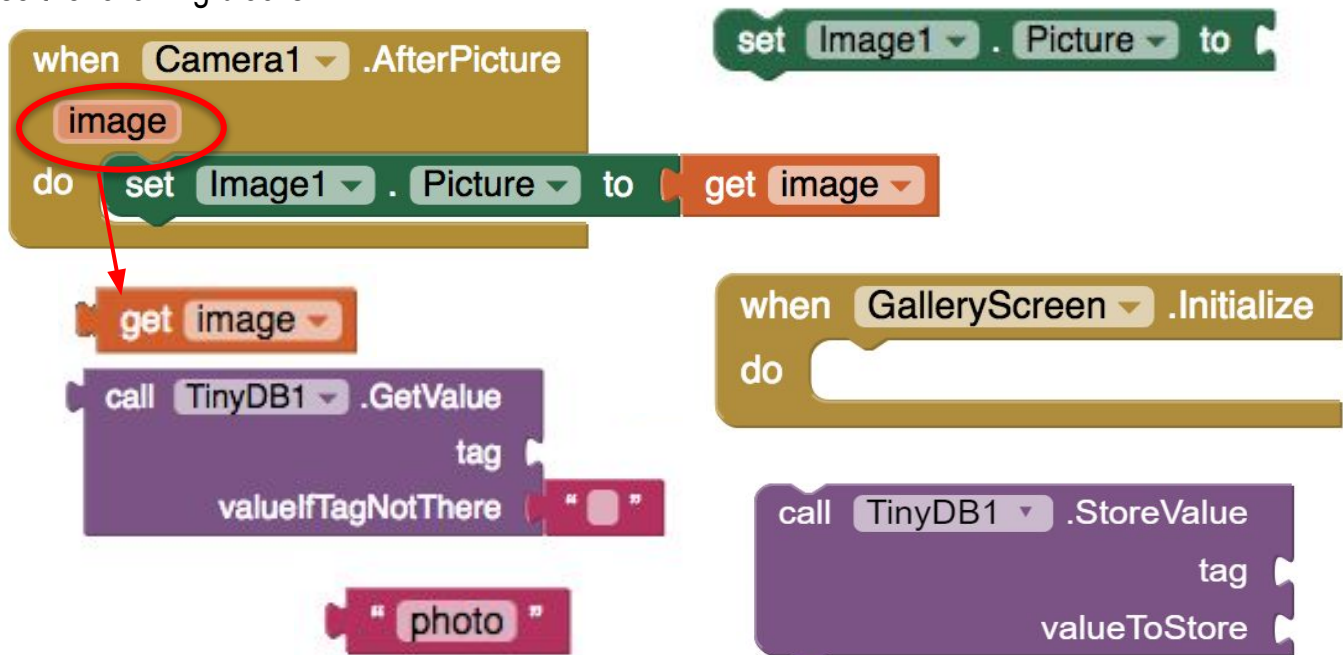
USE TINYDB TO STORE THE PICTURE

12

To make sure the picture is saved for the next time someone uses the app, you need to store it in **TinyDB**. Remember, **TinyDB** stores information persistently, so it will always be saved.

- When a picture is taken, store it in **TinyDB**.
- When the **GalleryScreen** initializes, retrieve any stored image from **TinyDB** and set the **Image1.Picture** to the stored value.

Use the following blocks.



13

Test again! Test out your app with the MIT AI2 Companion.

- Go to the **GalleryScreen**.
- Take a picture.
- Close the app and reopen it.
The picture should still be there!

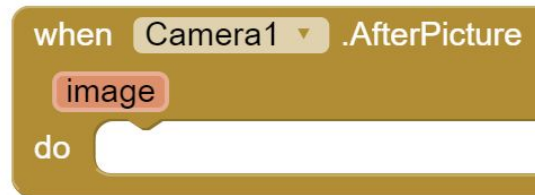


COMPUTATIONAL THINKING CONCEPTS

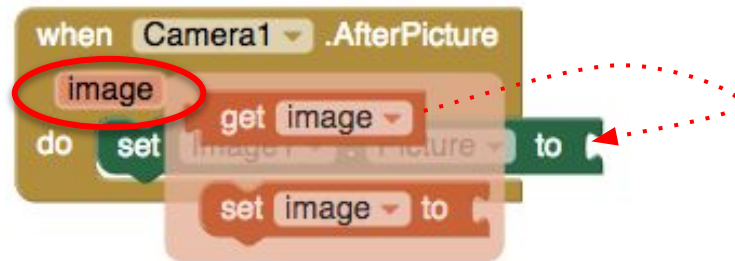
The following are the Computational Thinking Concepts used in GalleryScreen.

Tour Guide

1. Events



2. Variables/Naming



3. Data manipulation and elementary data structures

