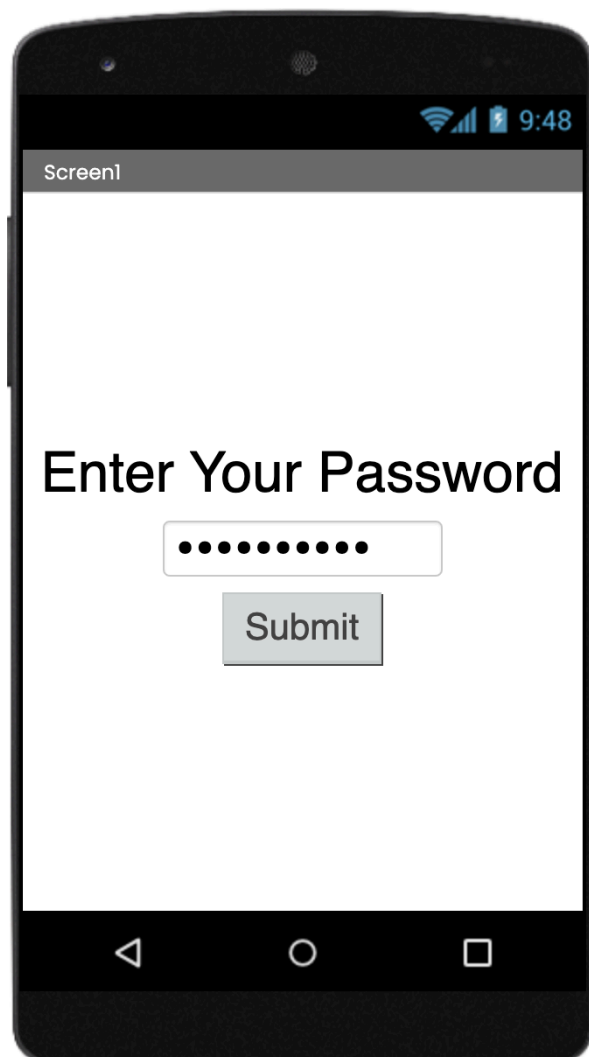


Password Purr Tutorial

Summary

Many people turn to their pets when they get stressed for comfort. In this tutorial, you'll create a de-stressing app that allows people to make a cat purr. In addition, you'll learn how to add password protection so that the cat isn't accessible to everyone. The skills learned in this tutorial include handling basic block-coding interactivity, media, and multiple screens.

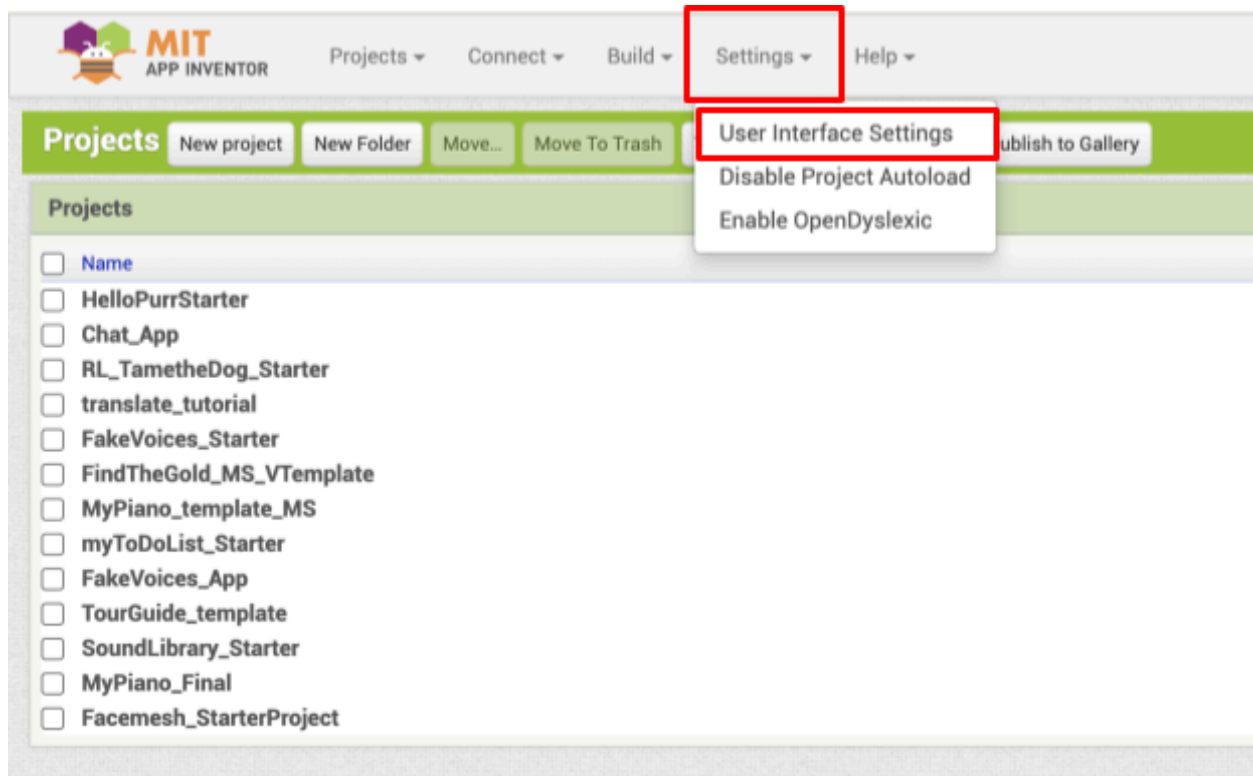


Setting Up App Inventor

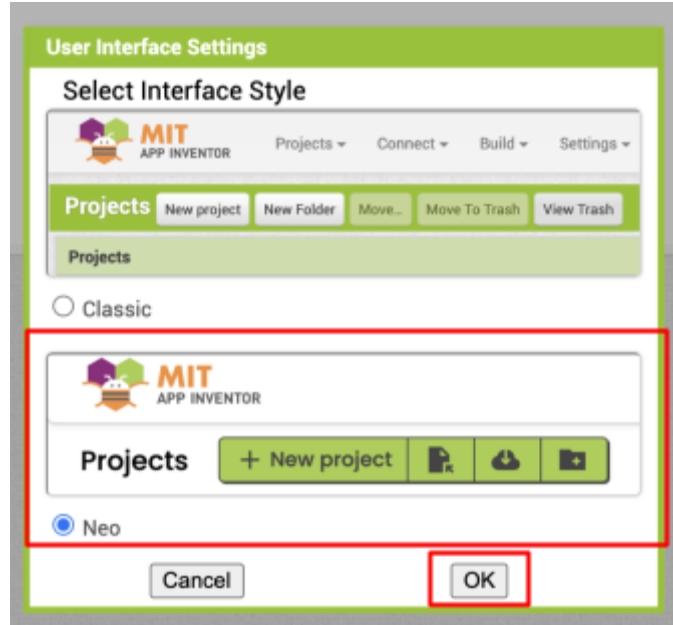
If you need help getting started and set up with App Inventor, please visit our [Setting Up App Inventor page](#).

Neo Interface

- We'll be doing this project in the new App Inventor interface, Neo. This will make App Inventor look more modern.
- To switch to the Neo interface, go to your Projects space.
- On the top menu bar, click on “Settings” > “User Interface Settings”



- Click on the “Neo” interface, and click “OK”



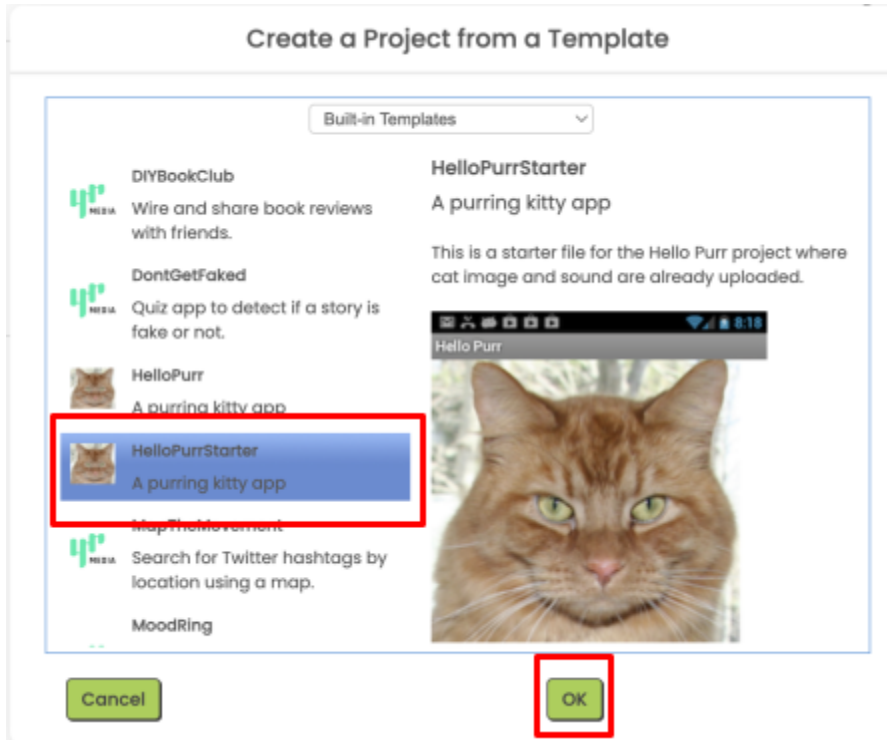
Import Project Template

- First, we have to import the starter file needed for this project.
- To do this, go to the cloud icon in the top left bar.

The image shows the "Projects" list in MIT App Inventor. The top bar contains a "+ New project" button, a cloud icon (highlighted with a red box), and other icons. Below the bar is a table of projects with columns for Name, Date Created, and Date Modified.

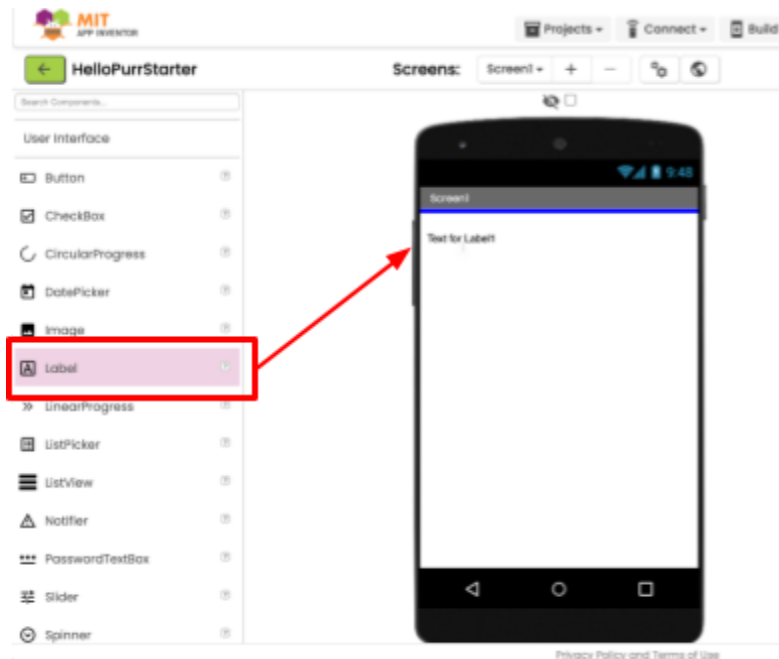
Name	Date Created	Date Modified
<input type="checkbox"/> FakeVoices_App	Oct 16, 2024, 9:24:28 AM	Oct 16, 2024, 3:25:18 PM
<input type="checkbox"/> FakeVoices_Starter	Oct 16, 2024, 9:13:58 AM	Oct 16, 2024, 9:20:48 AM
<input type="checkbox"/> Ri_TametheDog_Starter	Sep 18, 2024, 10:33:36 PM	Oct 15, 2024, 5:56:53 PM
<input type="checkbox"/> TourGuide_template	Sep 30, 2024, 9:06:49 PM	Oct 15, 2024, 5:56:44 PM
<input type="checkbox"/> HelloPurrStarter	Oct 6, 2024, 8:57:27 PM	Oct 15, 2024, 5:56:44 PM
<input type="checkbox"/> myToDoList_Starter	Oct 8, 2024, 12:22:36 PM	Oct 15, 2024, 5:48:31 PM
<input type="checkbox"/> SoundLibrary_Starter	Oct 8, 2024, 12:36:06 AM	Oct 8, 2024, 2:51:42 AM
<input type="checkbox"/> translate_tutorial	Oct 7, 2024, 11:40:05 PM	Oct 8, 2024, 12:11:52 AM
<input type="checkbox"/> MyPiano_Final	Oct 2, 2024, 3:45:45 PM	Oct 6, 2024, 8:25:54 PM
<input type="checkbox"/> MyPiano_template_MS	Sep 29, 2024, 5:49:57 PM	Oct 2, 2024, 3:47:06 PM
<input type="checkbox"/> FindTheGold_MS_VTemplate	Sep 29, 2024, 6:38:07 PM	Sep 30, 2024, 9:03:35 PM
<input type="checkbox"/> Facemesh_StarterProject	Sep 23, 2024, 9:45:01 PM	Sep 29, 2024, 6:01:42 PM

- Click on the template titled "HelloPurrStarter," and click "OK"

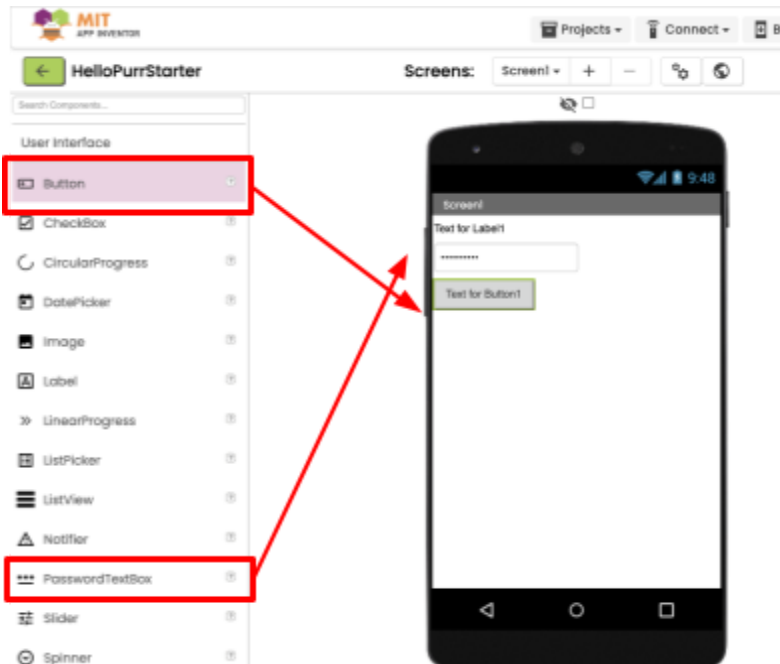


Password Screen

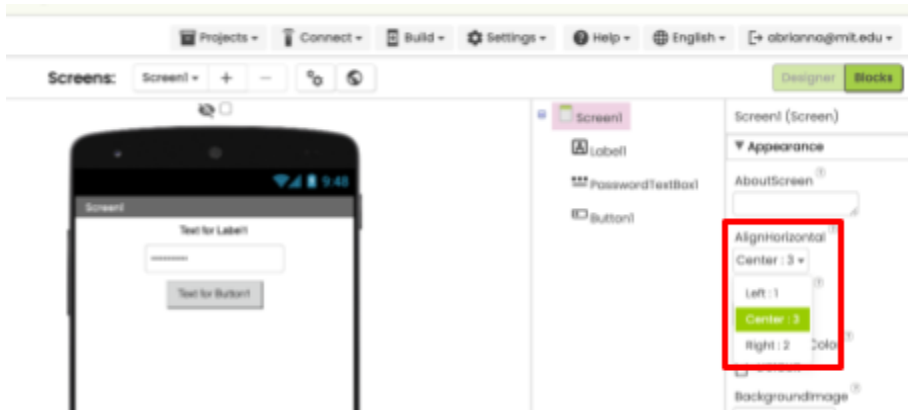
- Now that we have our project open, we need to add some components.
- We will first create our password screen.
- Click into the “User Interface” on the Components palette, and drag a “Label.”



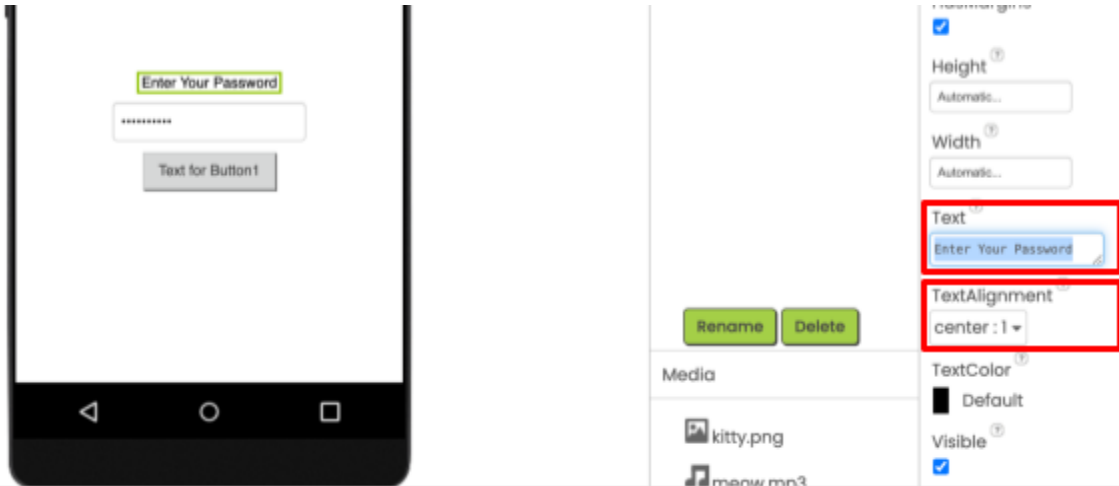
- Similarly, drag and drop a “PasswordTextBox” and a “Button” component for submission.



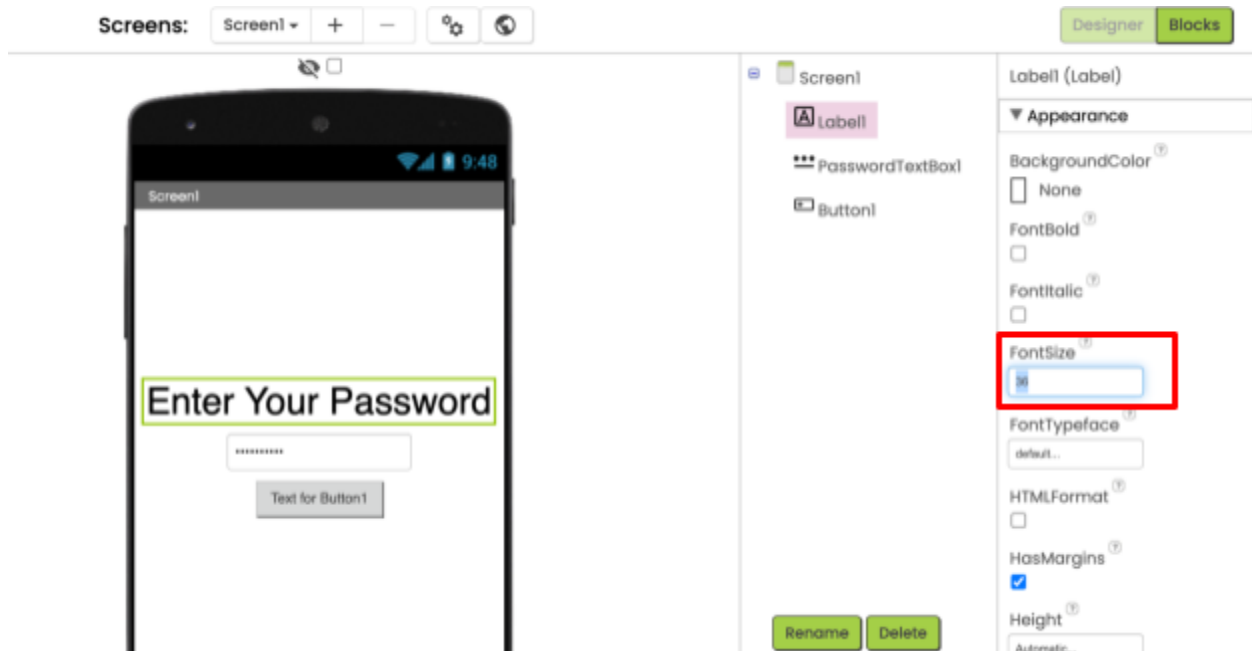
- Let’s make everything look better.
- Center all the elements by clicking the “Screen1” component, and selecting “AlignHorizontal” >> “Center: 3”



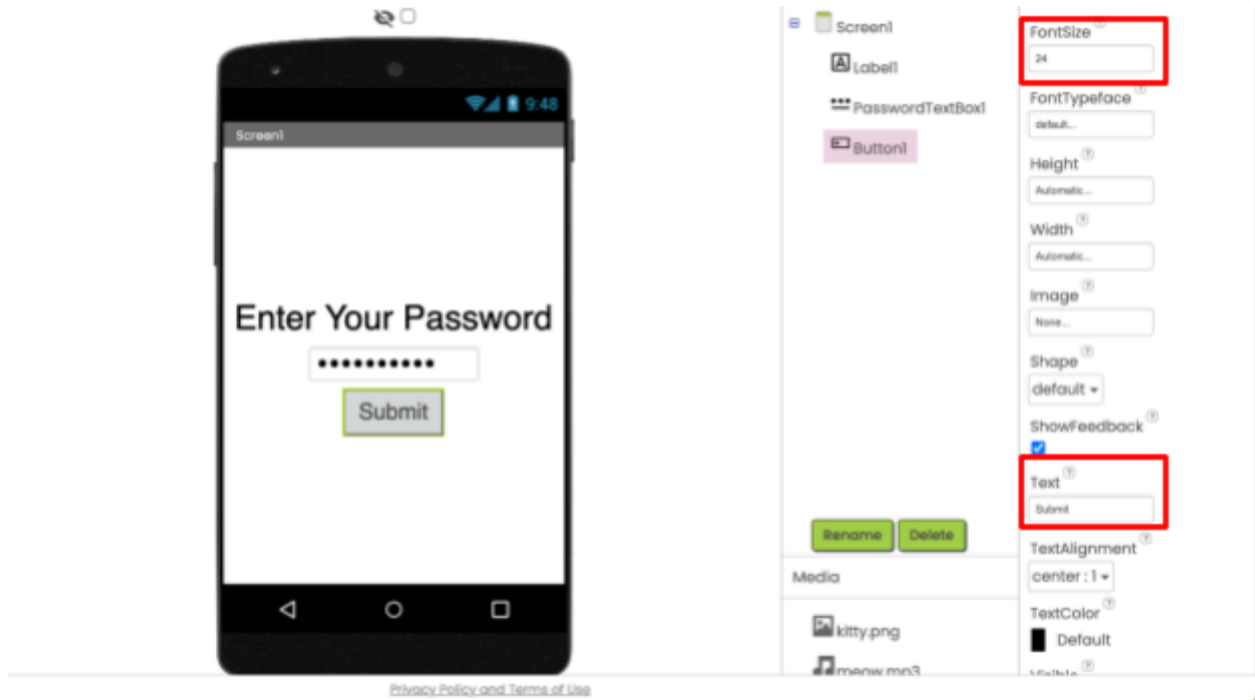
- Center the items vertically with “AlignVertical” too.
- Now click on the “Label1” component, and change its “Text” property to “Enter Your Password”



- Increase the “FontSize” property of the text to 36.

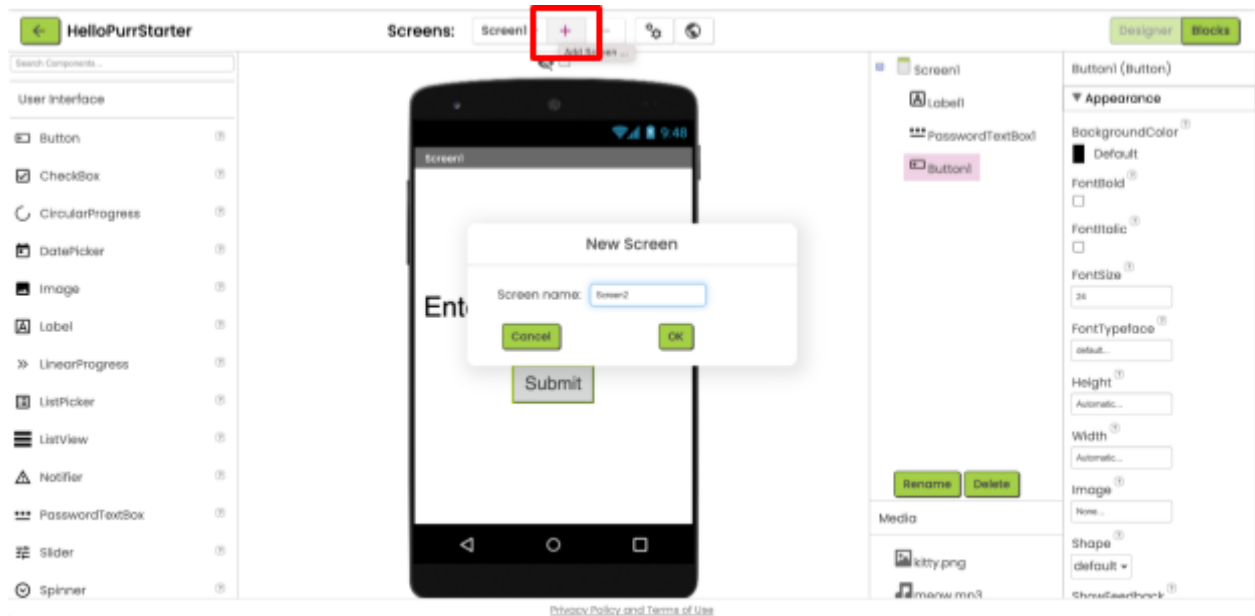


- Now click on the “Button1” component, and change its “Text” property to “Submit.” Increase font size if desired.



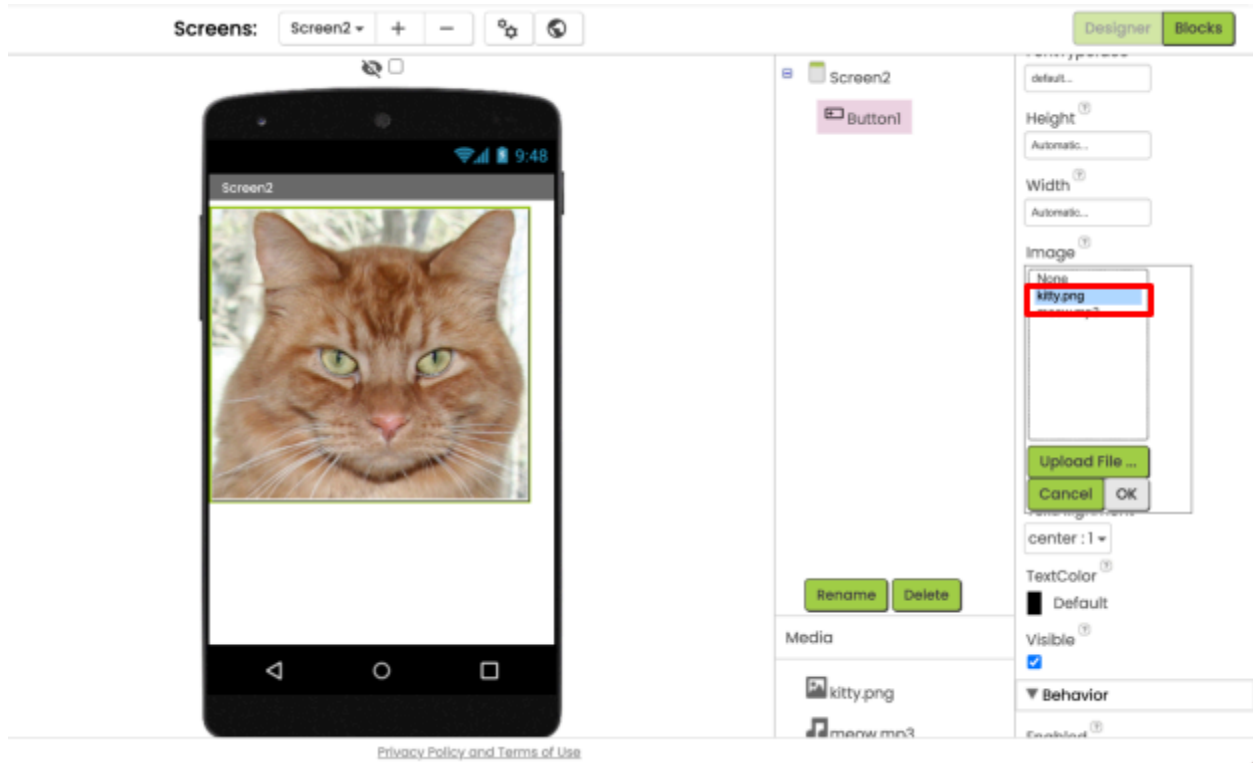
Cat Screen

- Now we will work on the screen displaying the cat..
- Add a new screen by clicking on the “+” button on the top bar next to Screen1.

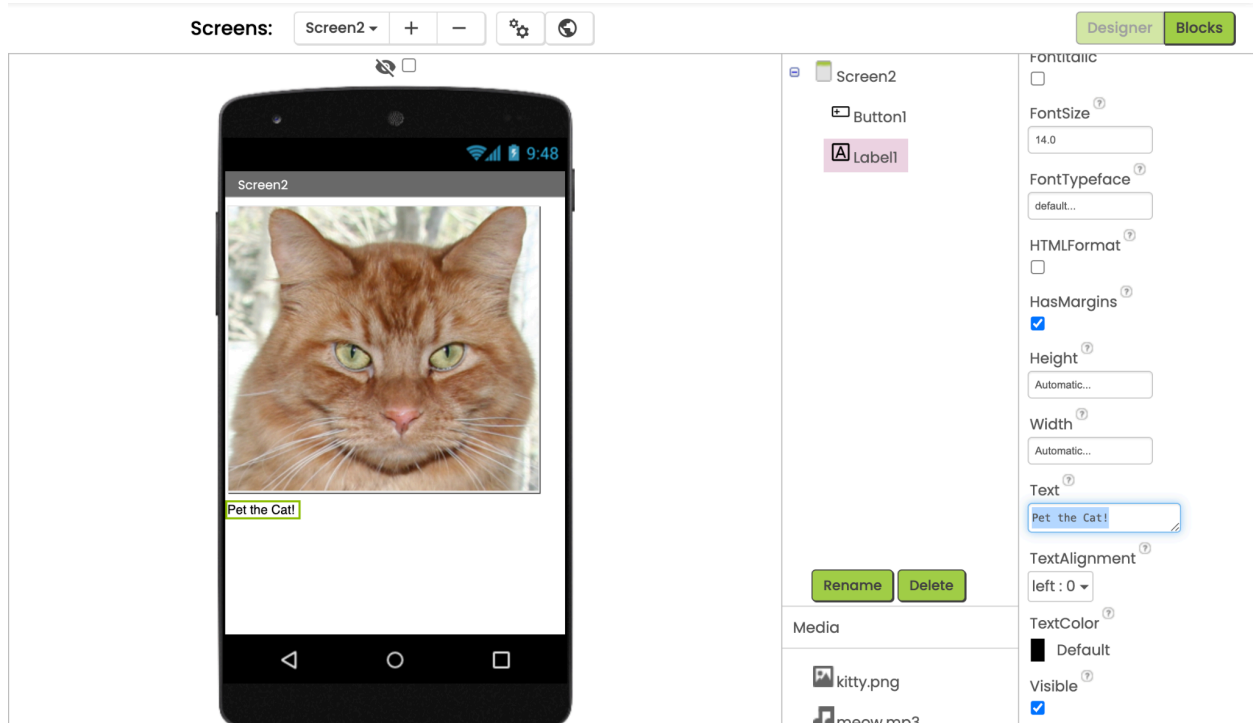


- Click “OK”
- We want the cat to be clickable, so it will be a button. Drag a button from the components palette.

- Click on the “Image” property on the right bar, and select “kitty.png”
- Erase the “Text” field in the button.

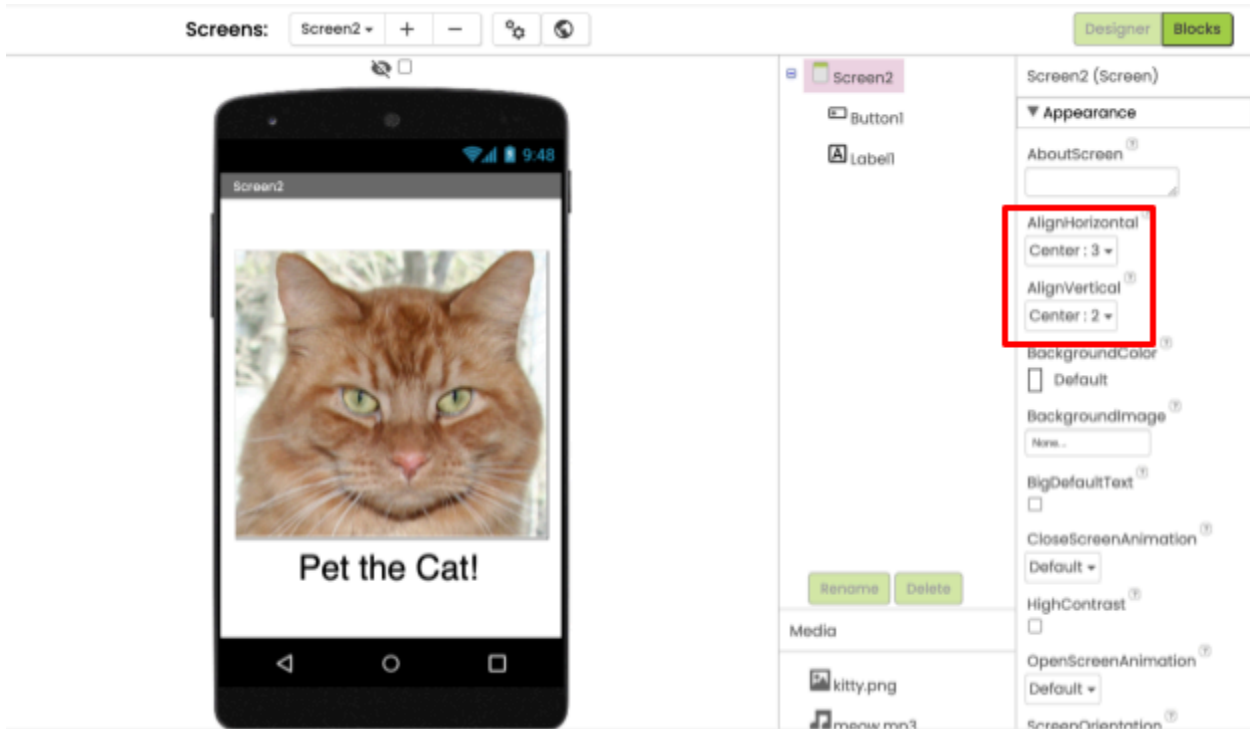


- From the components palette, drag in a label.
- Change the label’s “Text” property to “Pet the Cat!”

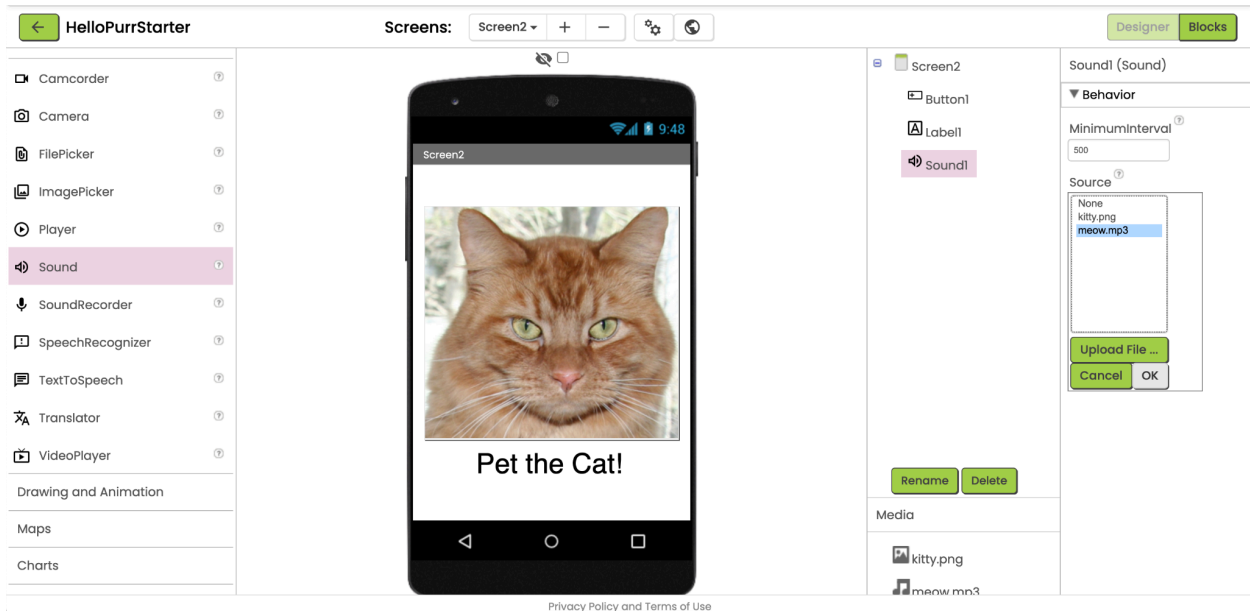


- Increase the label’s “Font” property to 36.

- Center Screen2 horizontally and vertically.



- Lastly, from the “Media” Components on the left, drag a “Sound” component.
- Set the Sound’s “Source” property to “meow.mp3.”



Block Code - Screen1

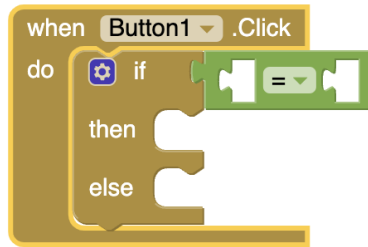
- Now we are ready to use block coding to give functionality to our components in the user interface! We'll be setting up the password protection.
- Click on the block editor, and switch to Screen1



- When the submit button is clicked, we want to check whether the text input is equal to the password. If so, we switch screens.
- Click on the "Button1" drawer and Drag the "When Button1.Click" event handler block.

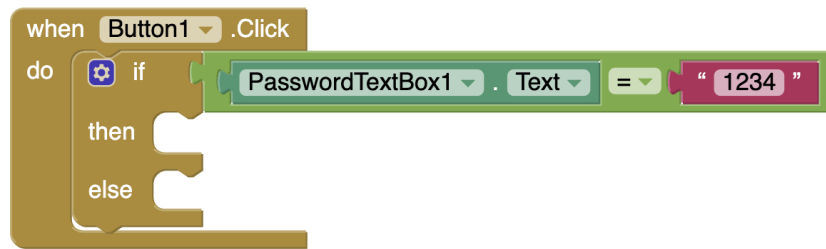


- From the Control drawer, drag an “If...then...else” block.
- From the Logic drawer, drag in an “=” comparator block.

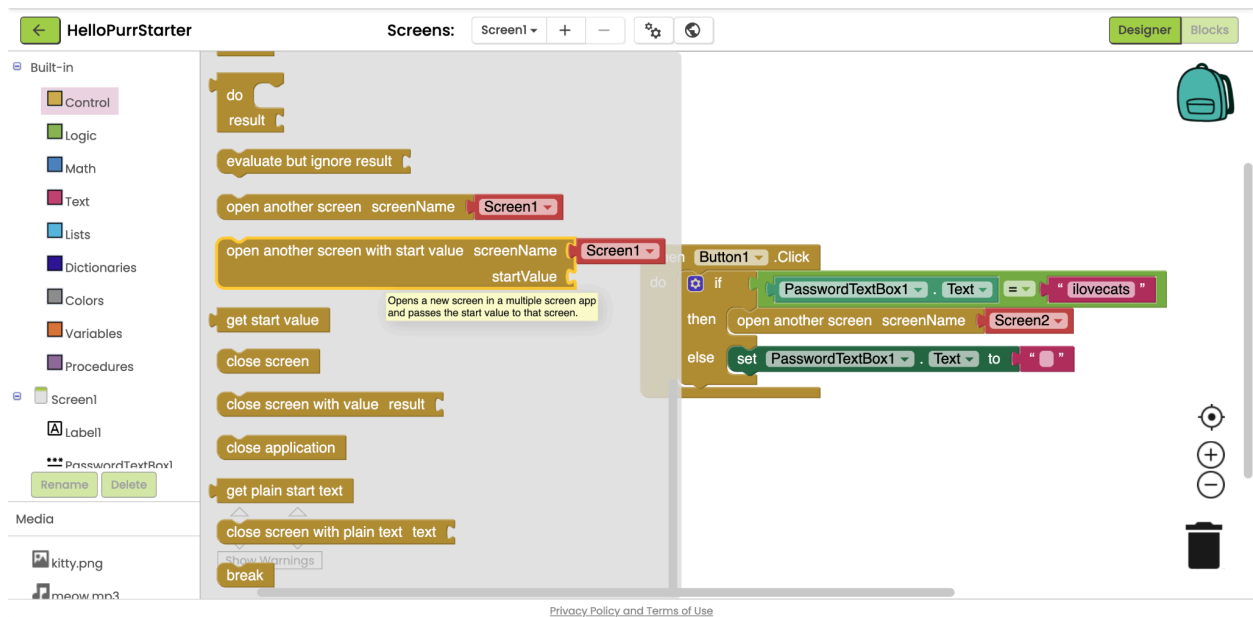


- Drag in appropriate blocks from the “PasswordTextBox1” drawer and “Text” drawer to compare the password text against any phrase you want, though it is advised to keep it simple.



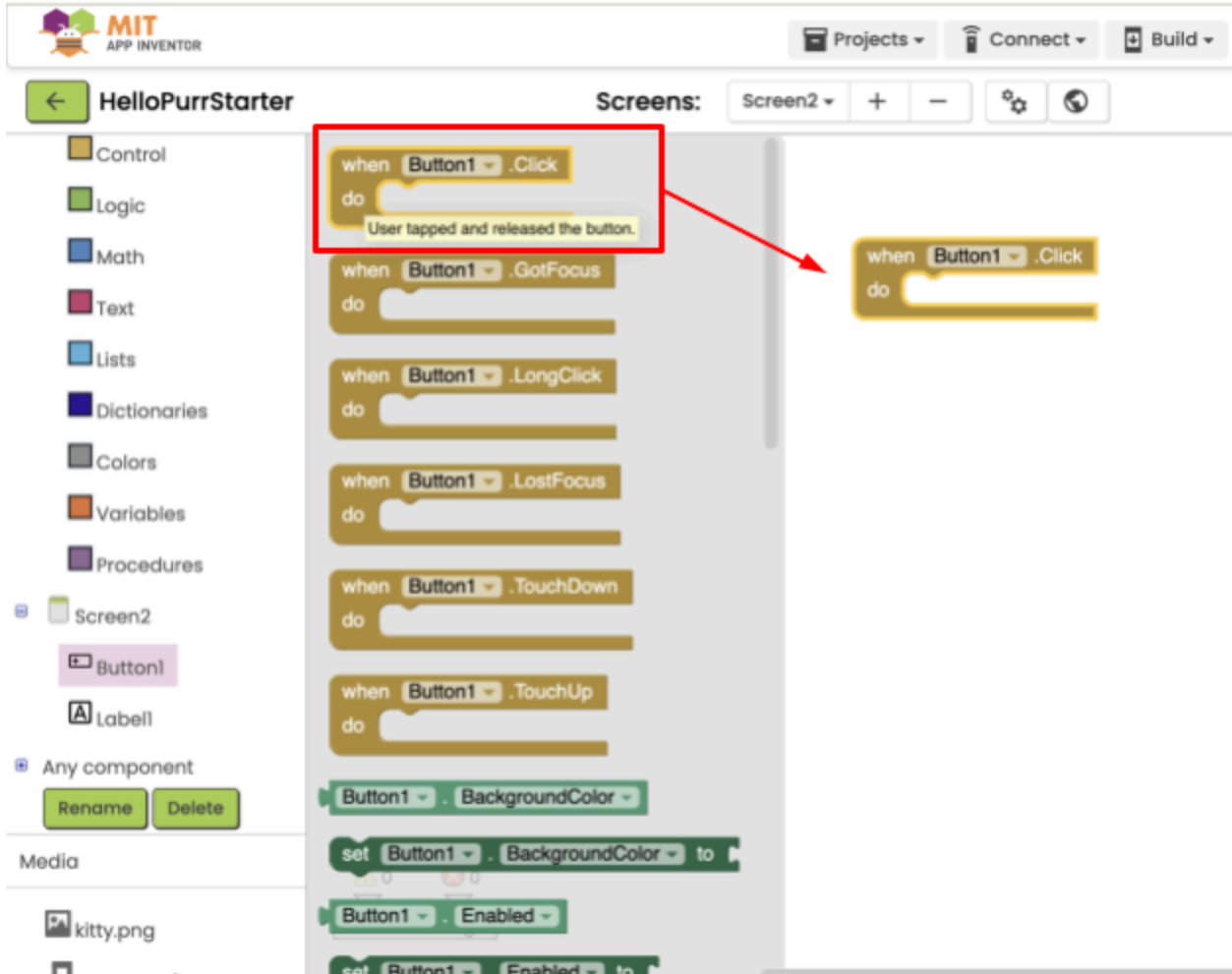


- If the password is correct, switch to Screen2. Click into the “Control” drawer again and scroll all the way down to find the “open another screen” block.
- Make sure to change the input to “Screen2.”
- If the password is incorrect, reset the password text box to blank.

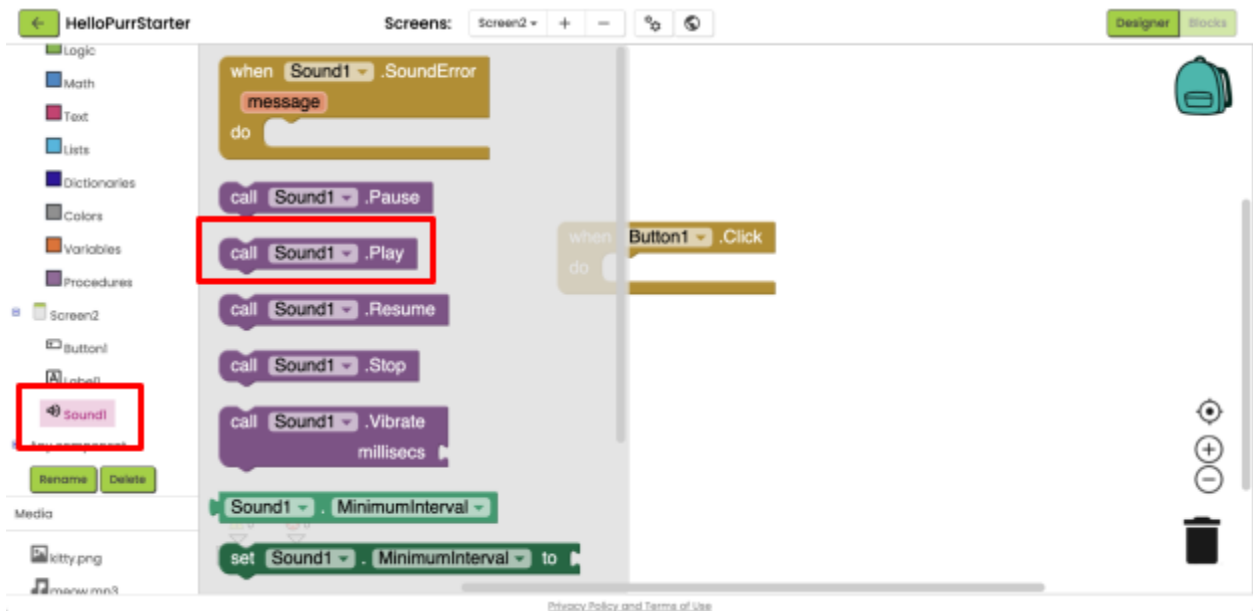


Block Code - Screen2

- Now we’re ready to code the cat!
- Switch to Screen2.
- Click on the “Blocks” editor in the top right corner.
- Drag the “When Button1.Click do” yellow event handler block from the left.



- Click on the Sound1 component, and drag in the “call Sound1.Play” block.

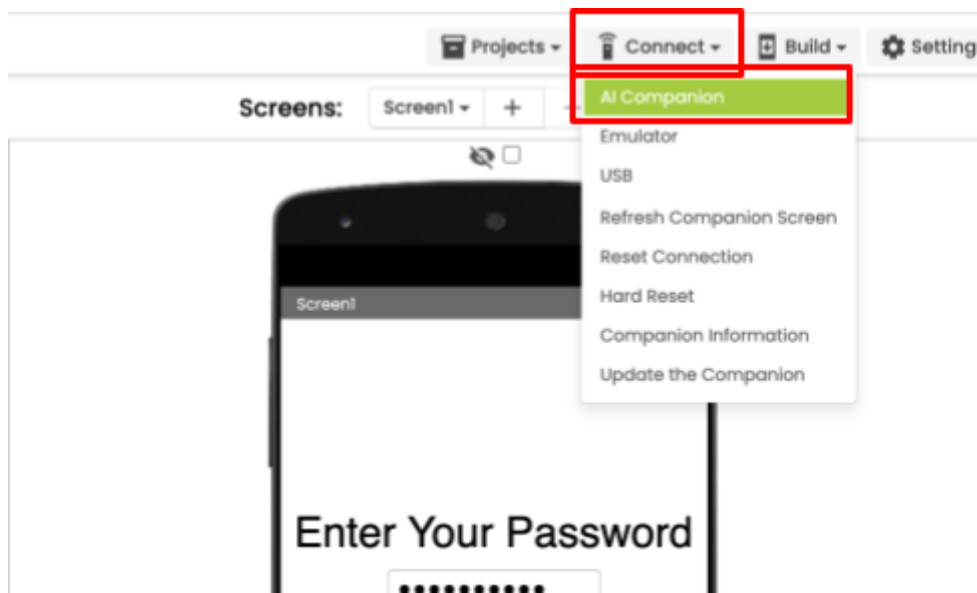


```
when Button1 .Click
do call Sound1 .Play
```

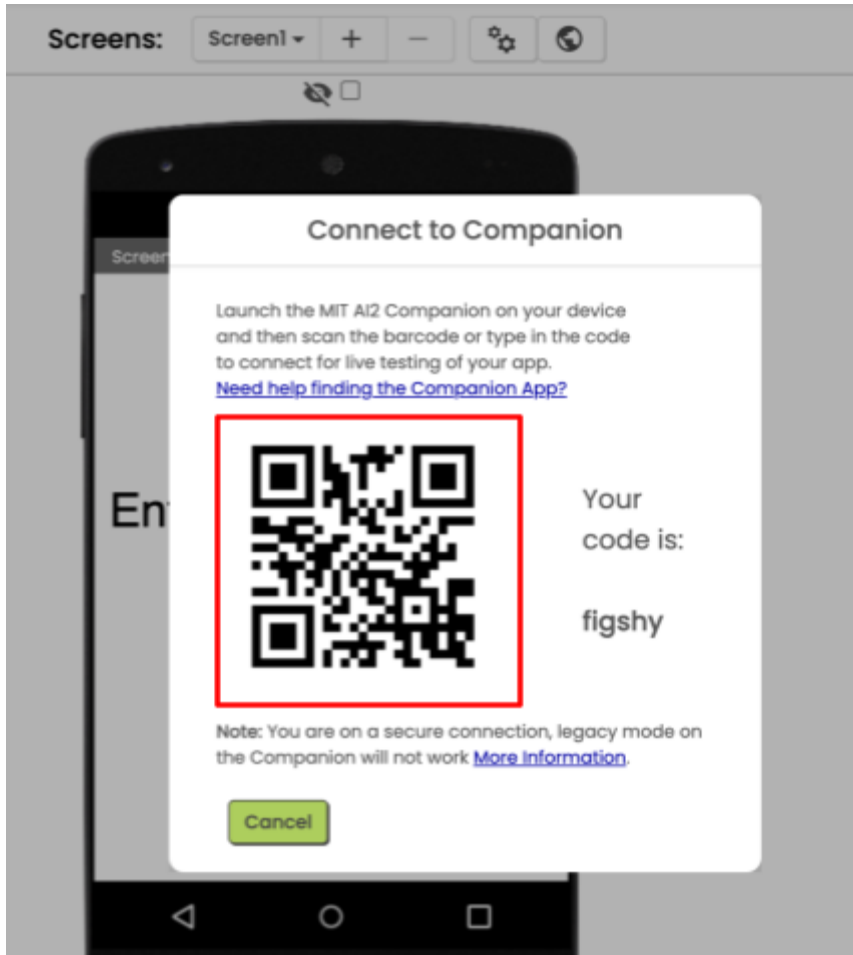
- Now the cat will meow when you tap or click on it.

Testing Your Code - AI Companion

- Now it's time to test your code on a mobile device!
- On your laptop/computer, make sure to switch to Screen1 first.
- Make sure if you have App Inventor installed on your mobile device. If you don't have App Inventor setup, please visit our [Setting Up App Inventor page](#).
- To connect your mobile device, click the "Connect" button in the top center >> "AI Companion"



- A QR Code should pop up



- Open up the App Inventor app on your mobile device and click “scan QR code.”
- Don’t scan the QR code above—it’s just an example. Scan the QR code on your own laptop/computer with your mobile device.
- The password screen should show up on your mobile device.
- Test it out!
- Ideally, you should be able to enter a password, then get taken to a picture of a cat. If you tap on the cat, it should purr!

Expand Your App

- To extend the project further, here are some suggestions of what you could do:
 - Make the app look nicer! Play around with font properties, colors, and positioning. How professional can you make it look?
 - How about different animals? Can you make the app switch to a random screen, each one with a different animal and sound, each time the password is inputted? (Hint: Store the screens into a list, and use the “pick a random item” list block.)

- Have a counter that keeps track of the number of incorrect password attempts, and stops the user if there are too many attempts.
- What other ideas do you have? Try them out!