

# Output in AppLab

Sheet 1.5



Output Code  
Makes the  
Output Device Do  
Something



# We Change the Screen Output



**Poke the Pig!**



**Whooo Whooo**

**Owl** **Duck**

**Cow** **Pig**

 Reset

Images  
Change

**Poke the Pig!**



**Oink Oink**


**Owl** **Duck**

**Cow** **Pig**

 Reset

Text  
Changes


**Poke the Pig!**



**Moooooo**

**Owl** **Duck**

**Cow** **Pig**

 Reset

# We Can Also Play Sounds



Meow!!!



# The Output Blocks

```
setText (▼ "WidgetId", "New Text");
```

Changes the text.

```
setImageUrl (▼ "WidgetId", ▼ "picName.jpg");
```

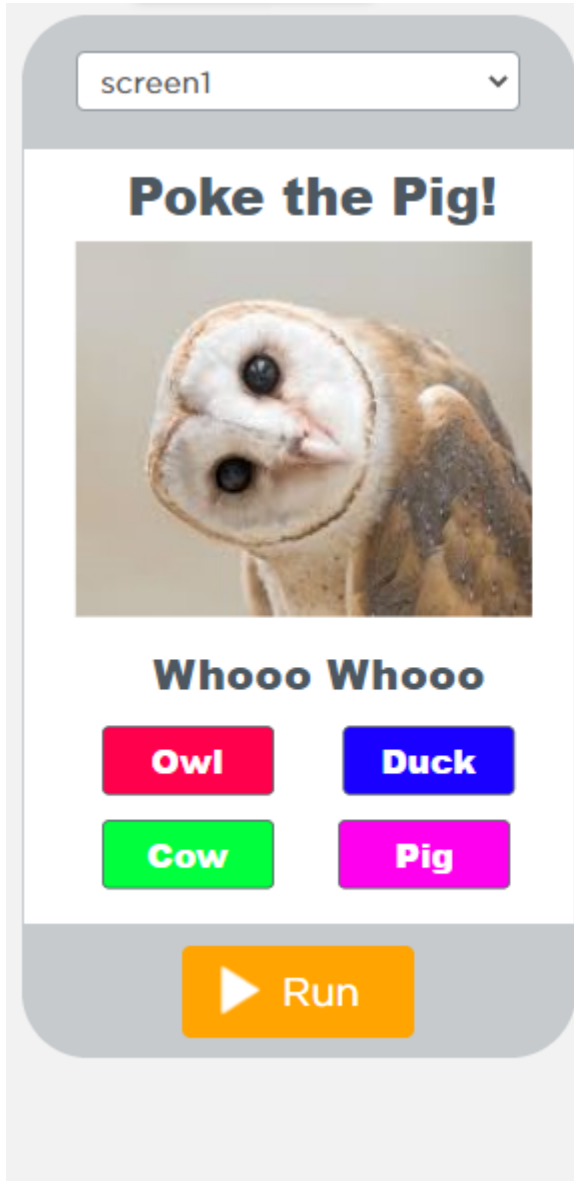
Changes the image.

```
playSound (▼ "noise.mp3", ▼ false);
```

Plays a sound.

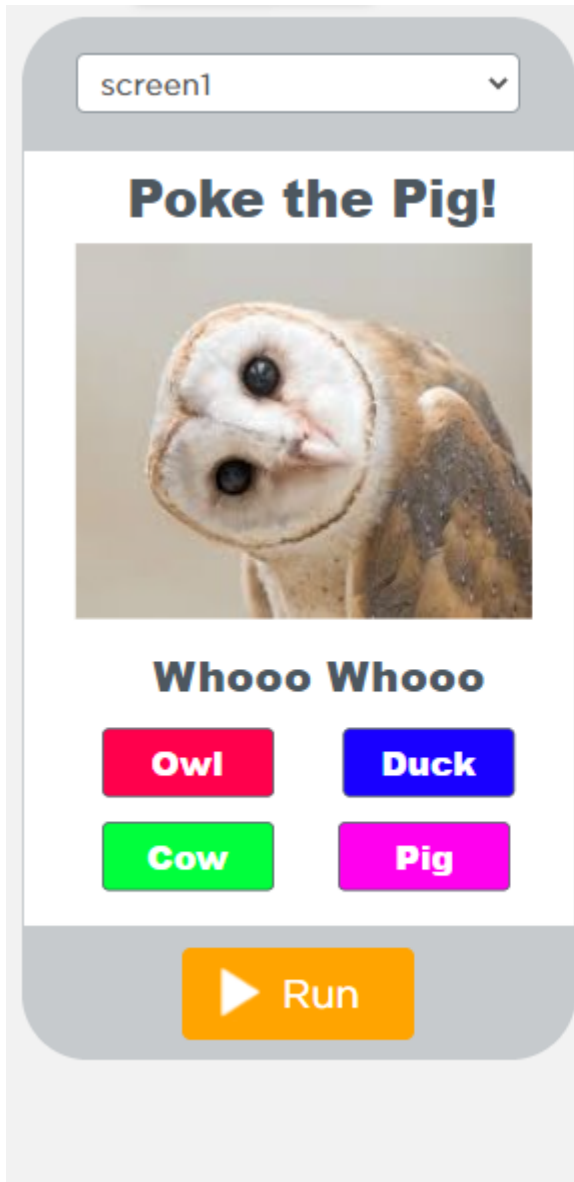
```
setScreen (▼ "screenId");
```

Changes the screen.



```
1  onEvent (▼ "Pig", ▼ "click", function ( ) {
2      playSound (▼ "sound://category_animals/pig.mp3", ▼ false);
3      setText (▼ "sound", "Oink Oink");
4      setImageURL (▼ "pic", ▼ "pig.jpg");
5  });
6  onEvent (▼ "Cow", ▼ "click", function ( ) {
7      playSound (▼ "sound://category_animals/cow.mp3", ▼ false);
8      setText (▼ "sound", "Mooooooooo");
9      setImageURL (▼ "pic", ▼ "cow.jpg");
10 });
11 onEvent (▼ "Owl", ▼ "click", function ( ) {
12     playSound (▼ "sound://category_animals/owl.mp3", ▼ false);
13     setText (▼ "sound", "Whooo Whooo");
14     setImageURL (▼ "pic", ▼ "owl.jpg");
15 });
16 onEvent (▼ "Duck", ▼ "click", function ( ) {
17     playSound (▼ "sound://category_animals/duck.mp3", ▼ false);
18     setText (▼ "sound", "Quack Quack");
19     setImageURL (▼ "pic", ▼ "duck.jpg");
20 });
```

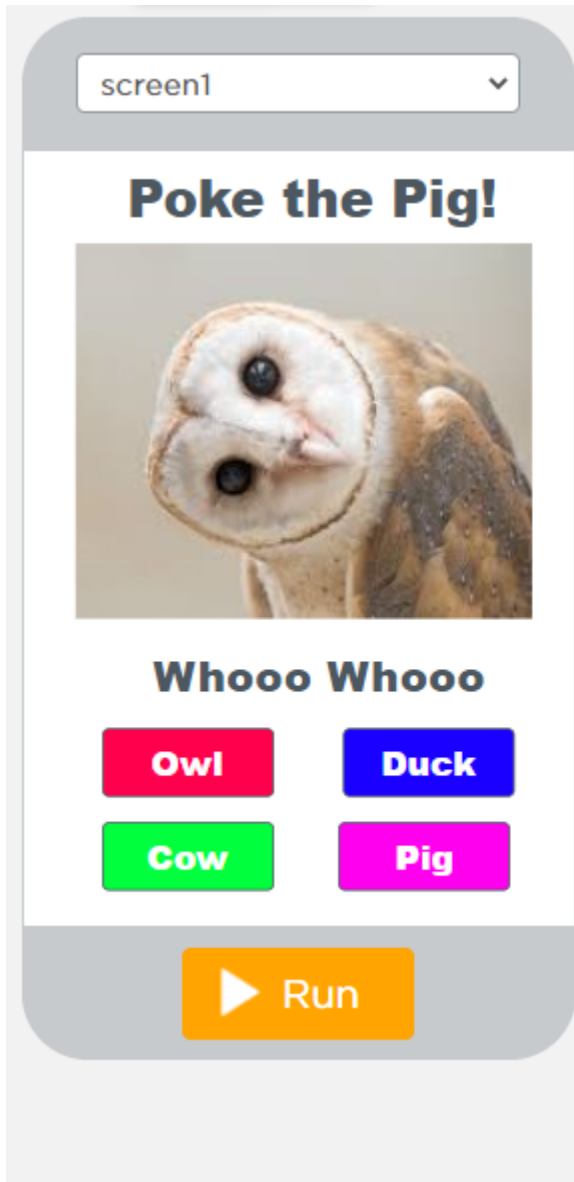
How many widgets?



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1  onEvent (▼ "Pig", ▼ "click", function ( ) {
2      playSound (▼ "sound://category_animals/pig.mp3", ▼ false);
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20 });
```

How many widgets?

7



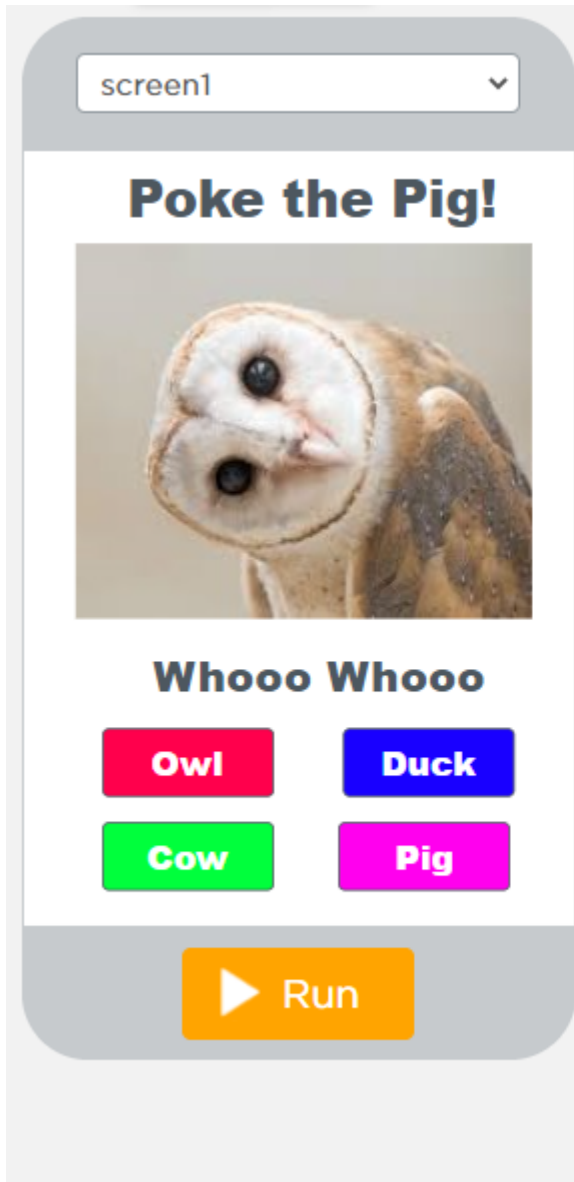
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1  onEvent (▼ "Pig", ▼ "click", function() {
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20 });
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How many widgets?

7

How many types of widgets?






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1  onEvent(▼ "Pig", ▼ "click", function(○) {
2      playSound(▼ "sound://category_animals/pig.mp3", ▼ false);
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4      setImageURL(▼ "pic", ▼ "pig.jpg");
5  });
6  onEvent(▼ "Cow", ▼ "click", function(○) {
7      playSound(▼ "sound://category_animals/cow.mp3", ▼ false);
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11 onEvent(▼ "Owl", ▼ "click", function(○) {
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20 });
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How many widgets?

7

How many types of widgets?

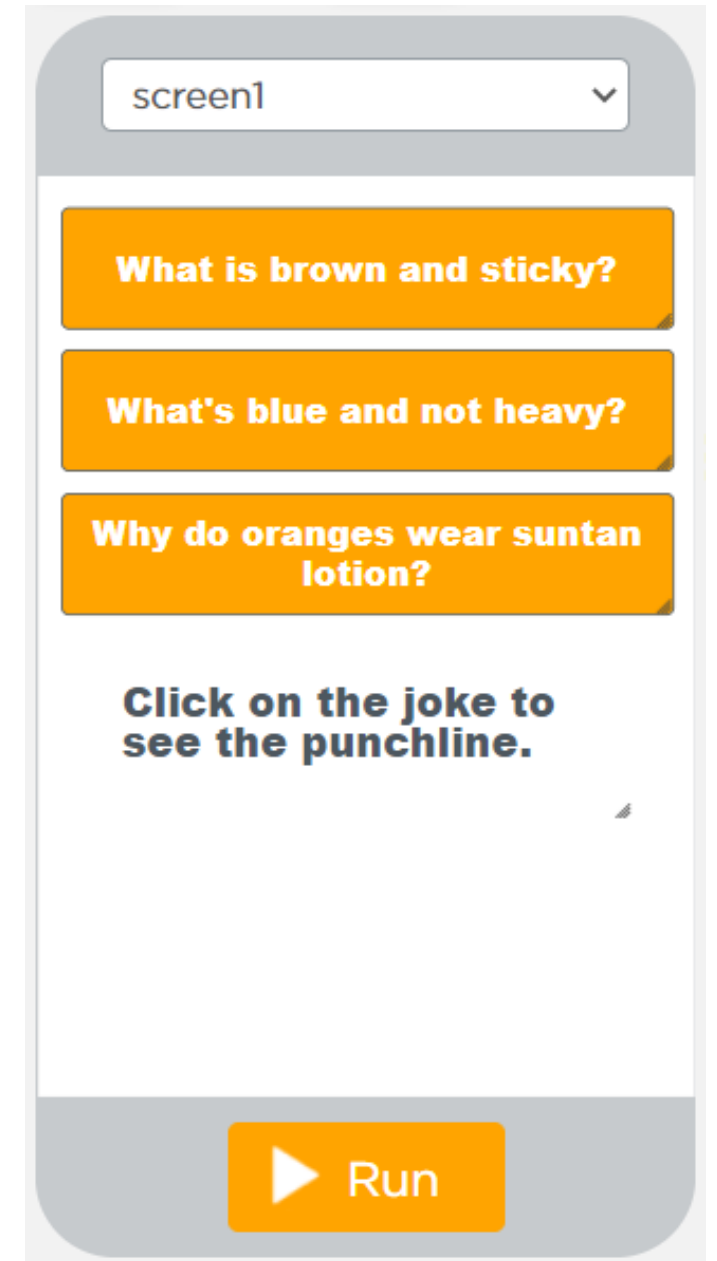
3



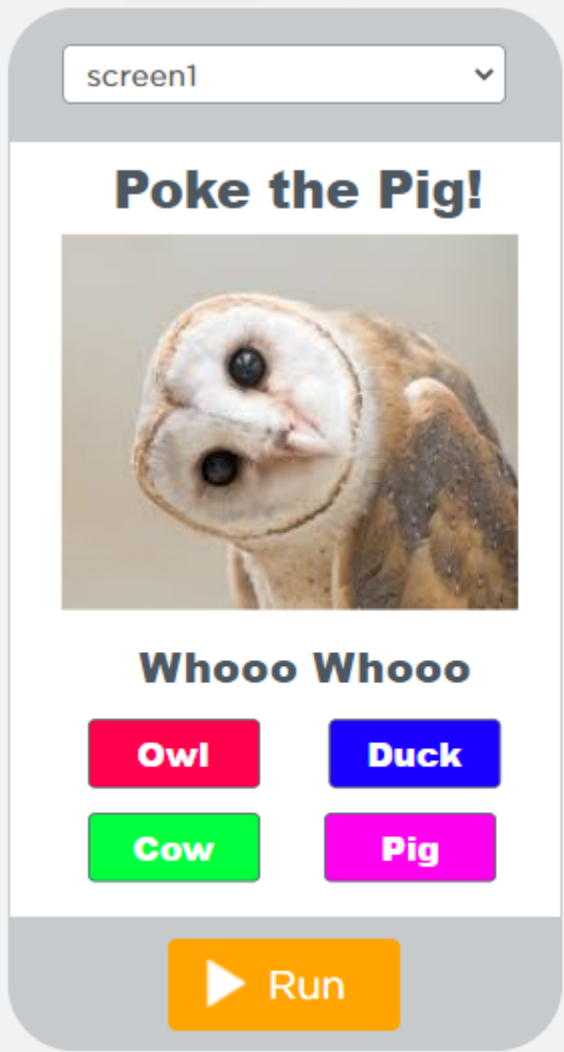
How do you  
know how  
many onEvents  
you need?

How do you know how many onEvents you need?

Count the buttons!  
You need one onEvent for each button.



What are the ids of the buttons?



```
1  onEvent (▼"Pig", ▼"click", function(○) {
2      playSound (▼"sound://category_animals/pig.mp3", ▼false);
3      setText (▼"sound", "Oink Oink");
4      setImageURL (▼"pic", ▼"pig.jpg");
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18     setText (▼"sound", "Quack Quack");
19     setImageURL (▼"pic", ▼"duck.jpg");
20 });
```

screen1

## Poke the Pig!



Whooo Whooo

Owl

Duck

Cow

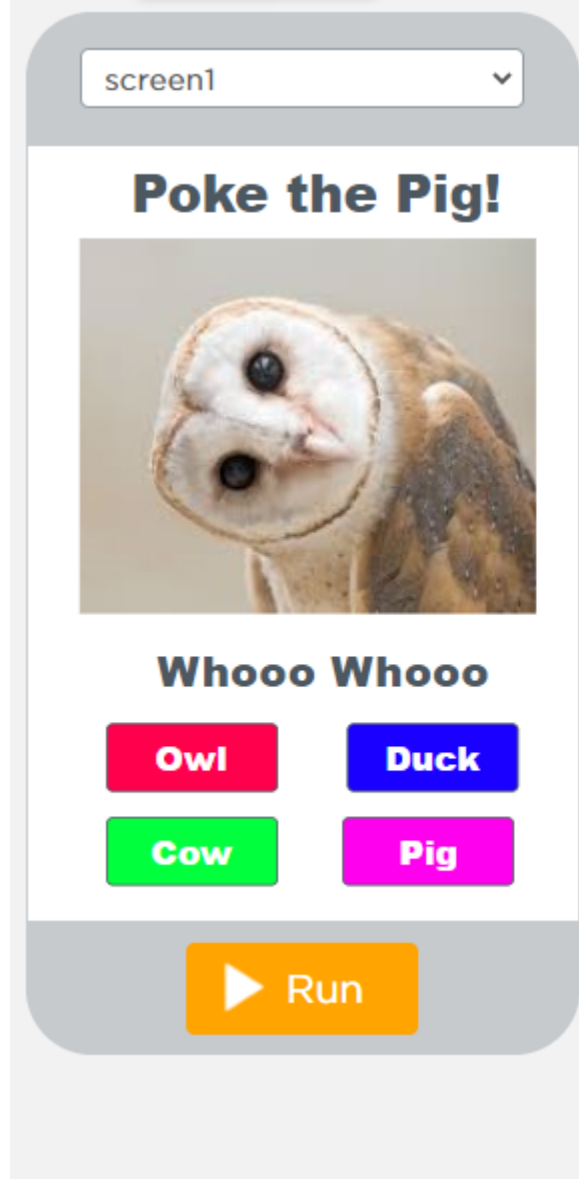
Pig

▶ Run

```
1  onEvent (▼ "Pig", ▼ "click", function(●) {
2      playSound (▼ "sound://category_animals/pig.mp3", ▼ false);
3      setText (▼ "sound", "Oink Oink");
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20 });
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What are the ids of the buttons?

Text id?

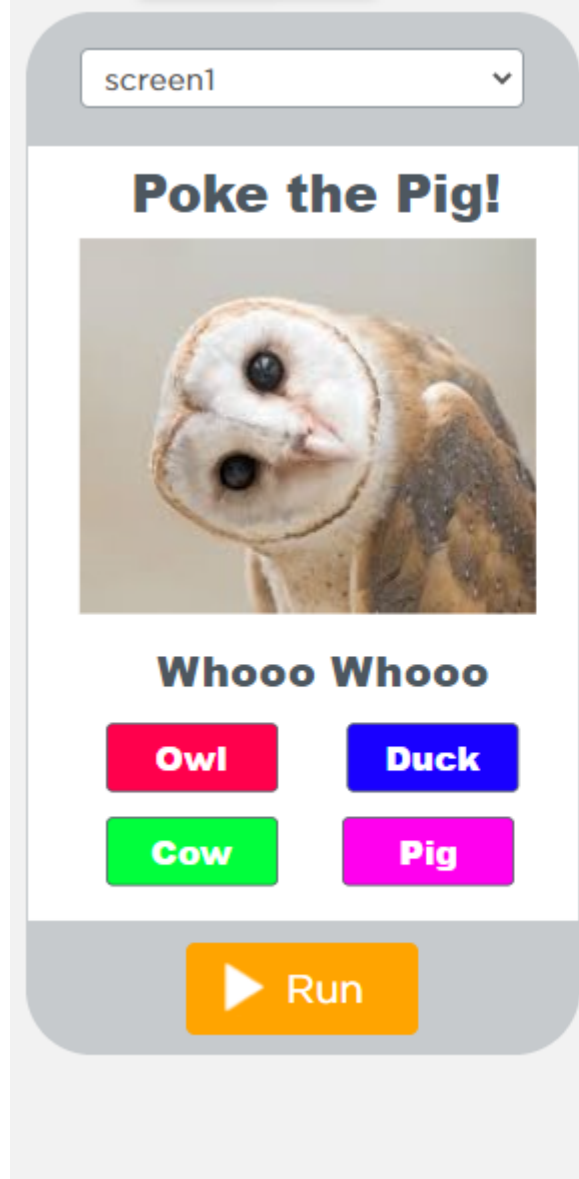


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1  onEvent (▼ "Pig", ▼ "click", function (○) {
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What are the ids of the buttons?

Text id?

Picture id?



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```

What are the ids of the buttons?

Text id?

Picture id?



Which  
widgets need  
ids?



Which  
widgets need  
ids?

Why?

All of the  
buttons

Any images or  
code that  
change.

Which  
widgets need  
ids?

All of the  
buttons

Any images or  
code that  
change.

Why?

It makes the  
code easier to  
read.

Which widgets need ids?

All of the buttons

Any images or code that change.

Why?

It makes the code easier to read.

```
onEvent ▼ "button1", ▼ "click", function() {  
  playSound(▼ "sound://category_animals/cat.mp3", ▼ false);  
};  
  
onEvent ▼ "catButton", ▼ "click", function() {  
  playSound(▼ "sound://category_animals/cat.mp3", ▼ false);  
};
```