Project 62

DP EDUCATION

Coding School

62

Ruby Robot

male ▾   English ▾

What is your name?   **How are you?**

How many days are there in a week?   **What is your hobby?**

What is the capital city of Sri Lanka?   **Who created you?**

Built on Code Studio ▲

How It Works

Start here

See the App

Built on Code Studio ▲

❖ Let's create a talking robot friend (Ruby robot).

❖ Let's design the screen first. Give the colour code "#187CFC" as the screen background colour

❖ Let's use a label to display the robot friend's name at the top of the screen. Give the Text as "Ruby Robet".

❖ Show the image of the robot friend below it and add an image. Change its properties as follows.

PROPERTIES EVENTS

id
image1

width (px)
220

height (px)
175
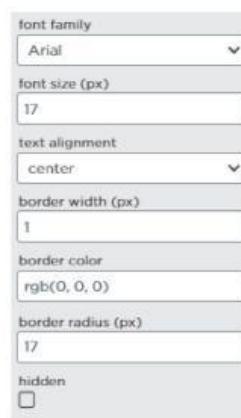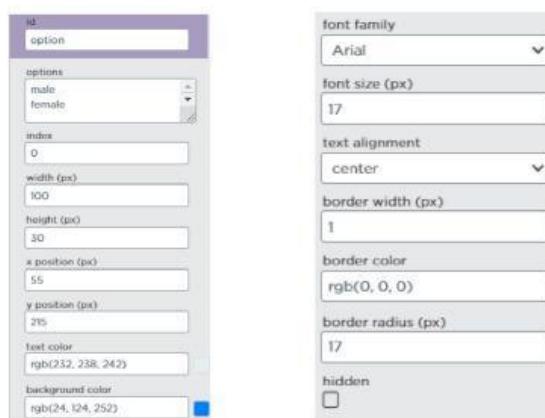
x position (px)
55

y position (px)
35

image
Choose...

But the image is only created. The image will not be selected at this time. Let's provide the url for it while coding.

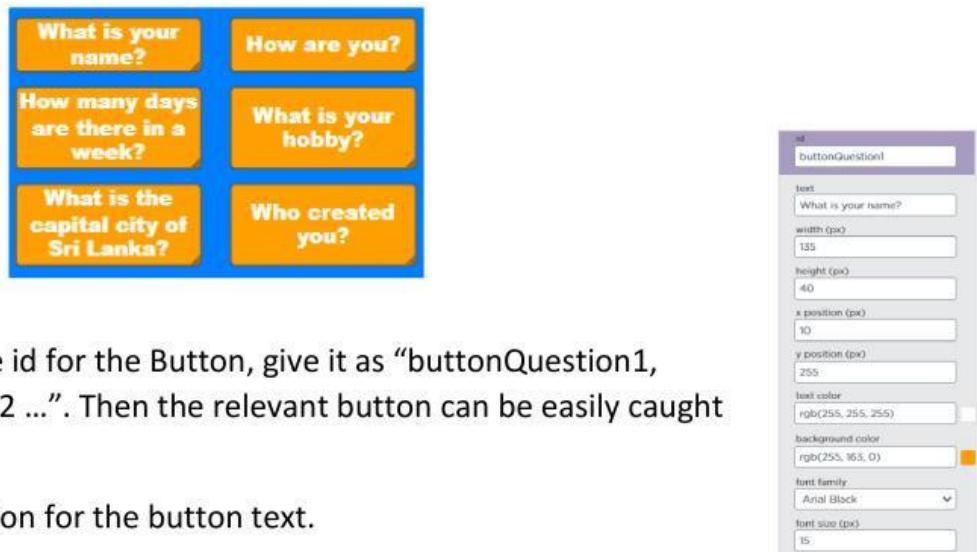❖ Below the Image, let's create two dropdowns to select the Voice and to select the Language.

male ▾   English ▾

Adjust the properties of the add dropdown to select the voice in this way

Give "male" and "female" as its two options. Give the Id as "option".

id
option

options
male
female

index
0

width (px)
100

height (px)
30

x position (px)
55

y position (px)
215

text color
rgb(232, 238, 242)

background color
rgb(24, 124, 252)

font family
Arial

font size (px)
17

text alignment
center

border width (px)
1

border color
rgb(0, 0, 0)

border radius (px)
17

hidden
☐

❖ The dropdown to select the language can be easily created by duplicating the above dropdown. But give its id as "languageOption" and options as "English, Sinhala".

❖ Now let's create a button with questions to ask Ruby friend.

What is your name?	How are you?
How many days are there in a week?	What is your hobby?
What is the capital city of Sri Lanka?	Who created you?

id
buttonQuestion1

text
What is your name?

width (px)
135

height (px)
40

x position (px)
10

y position (px)
255

text color
rgb(255, 255, 255)

background color
rgb(255, 163, 0)

font family
Arial Black

font size (px)
15
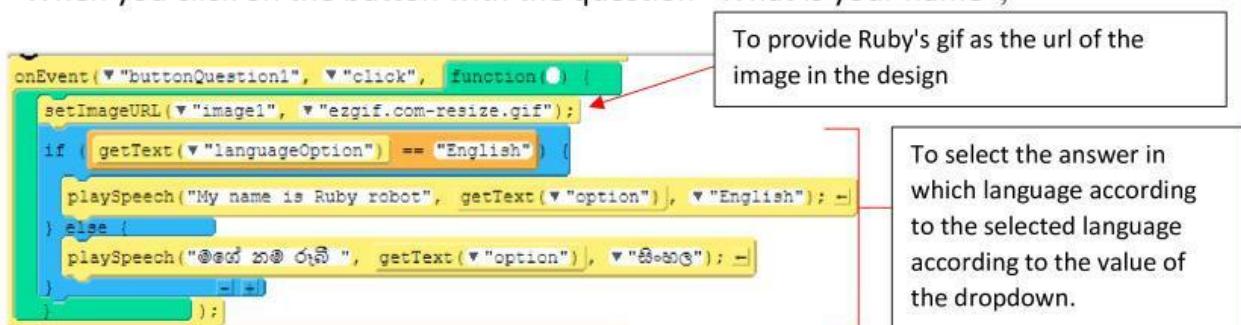
❖ When giving the id for the Button, give it as "buttonQuestion1, buttonQuestion2 …". Then the relevant button can be easily caught during coding.

Enter the question for the button text.

Create buttons for all the questions as above.

❖ After designing in that way, let's start coding.

❖ When you click on a button with each question, let's set the image of Ruby robot to appear in the image we designed, and hear the answer according to the selected voice and language.

❖ When you click on the button with the question "What is your name",

```
onEvent(▼"buttonQuestion1", ▼"click", function() {
  setImageURL(▼"image1", ▼"ezgif.com-resize.gif");
  if ( getText(▼"languageOption") == "English" ) {
    playSpeech("My name is Ruby robot", getText(▼"option"), ▼"English");
  } else {
    playSpeech("මගේ නම රූබි ", getText(▼"option"), ▼"සිංහල");
  }
});
```

To provide Ruby's gif as the url of the image in the design

To select the answer in which language according to the selected language according to the value of the dropdown.

LIVEWORKSHEETS

❖ `playSpeech("My name is Ruby robot", getText(▾"option"), ▾"English");`

The answer to be given by the robot to the question on the

According to the value of "male" or "female" in the voice selection dropdown, the text will be received at this position.

❖ After coding as above for one button, code in the same way when you click on other buttons. The only thing that changes is the answer the robot has to say.

❖ "How are you?" The code for the button with the question is as follows.

```
onEvent(▾"buttonQuestion2", ▾"click", function() {
  setImageURL(▾"image1", ▾"ezgif.com-resize.gif");
  if (getText(▾"languageOption") == "English") {
    playSpeech("I am fine. How about you?", getText(▾"option"), ▾"English");
  } else {
    playSpeech("මම හොඳින්. ඔබට කොහොමද?", getText(▾"option"), ▾"සිංහල");
  }
});
```

❖ Prepare codes for other buttons in the same way.

Select the correct answer.

1. `getText(▾"languageOption") == "English"` What does this mean?

Checking whether the value of "languageOption" is equal to "English" language

Checking that the text value of the dropdown named "languageOption" is "English".

Set the value of "languageOption" variable as "English".

2. `playSpeech("My name is Ruby robot", getText(▼"option"), ▼"English"); ⏎` Choose the answer that correctly explains this part.

Saying "My name is ruby robot" in English by the voice selected by the user.

Saying "My name is ruby robot" in English by a male voice.

3. Saying "My name is ruby robot" in Sinhala by a female voice. What is the correct step to create Tamil to select the robot friend as the answer language?

Design > Select "languageOption" dropdown > Properties > Options > Add "தமிழ்" to the option list

Design > Select "option" dropdown > Properties > Options > Add "தமிழ்" to the option list

Design > Select "languageOption" dropdown > Properties > Options

4. Select the correct code section to change the question on the first button to "what is the weather today" by code.

`setProperty(▼"buttonQuestion1", ▼"text-align", ▼"what is the weather today");`

`setProperty(▼"buttonQuestion4", ▼"font-family", ▼"what is the weather today");`

`setProperty(▼"buttonQuestion1", ▼"text", ▼"what is the weather today");`

5. Which code is used to select what is the selected voice in the code section?

`getText(▼"option")`   `setText(▼"option", "male");`

`playSpeech("My name is Ruby robot", ▼"male", ▼"English"); ⏎`