Project 76

DP EDUCATION

Coding School

76

Body Mass Index

ID : 96221221

Name : Dulanja

Age : 13

BMI : 0

UNDERWEIGHT
<18,5

How It Works

Start here

See the App

Built on Code Studio ▲

LIVEWORKSHEETS
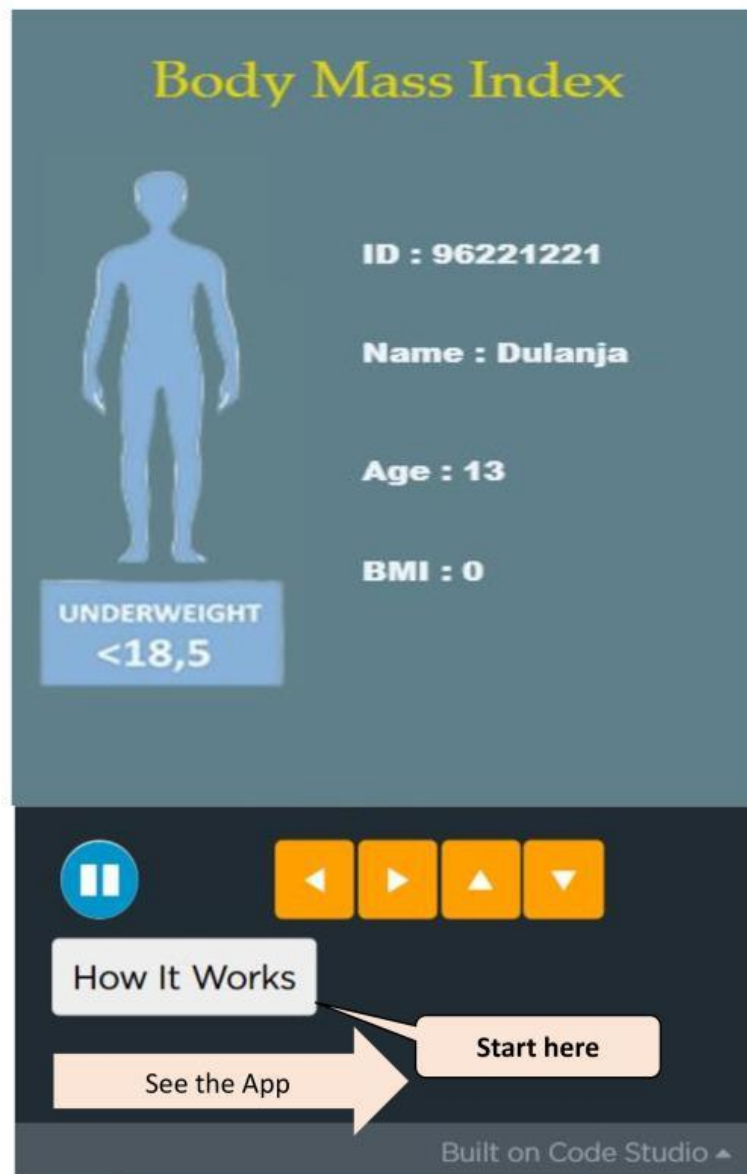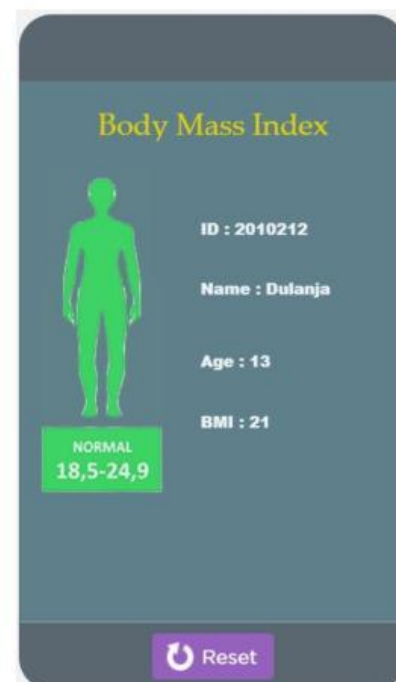
Let's create the App to find the BMI value.

There

After giving User Details and clicking the Generate button, you should go to Screen2.

According to the height and weight given in Screen1, the BMI value should be calculated and the corresponding image should be shown. Age should also be calculated according to the given year of birth.

User Details

ID : 2010212

Name : Dulanja

Year of Birth : 2010

Height: 130

Weight: 35

Generate

↻ Reset

(Screen1)

Body Mass Index

ID : 2010212

Name : Dulanja

Age : 13

BMI : 21

NORMAL
18,5-24,9

↻ Reset

(Screen2)

❖ The background and basics you need are provided.

❖ Labels related to the App have been created for you. Create text input for each label. In the text inputs, give the height as 30 and the width as 200.

❖ Enter the X and Y position of the text inputs below.

ID	x- position	y- position
inputID	110	105
inputName	110	145
inputBirthday	110	185
inputHeight	110	225
inputWeight	110	265

❖ Create a button as "Generate" and give the following properties.

PROPERTIES	EVENTS
id	
btnGenerate	
text	
Generate	
width (px)	
100	
height (px)	
40	
x position (px)	
110	
y position (px)	
330	
text color	
rgb(242, 255, 25)	
background color	
rgb(17, 36, 142)	

PROPERTIES	EVENTS
font family	
Arial Black	
font size (px)	
15	
text alignment	
center	
image	
	Choose...
border width (px)	
2	
border color	
rgb(9, 13, 16)	
border radius (px)	
18	
hidden	
☐	

❖ Create the following variables to calculate the Age.

```
var brithday;
var currentYear = 2023;
var age = 0;
```

❖ Create the following variables to calculate the BMI value.

```
var height;
var weight;
var bmi = 0;
```

❖ When the Generate Button is clicked, Age and BMI should be calculated and displayed on Screen2.

❖ Let's calculate the age first.

❖ Here, current year is given to the variable taken as currentYear. Here var currentYear = 2023; is given as Because in calculating the Age, the Year of Birth is subtracted from the current year, so current year is given as numeric data type to the currentYear variable.

```
onEvent(▼ "btnGenerate", ▼ "click", function() {
    //Calculate age
    brithday = getText(▼ "inputBirthday");

    age = currentYear - brithday;
```

❖ Now let's calculate the BMI value.

❖ Let's assign the user's height and weight to two variables. The `getNumber()` code block is used here. Since a math work is done here, the above code block has been used to get the height and weight numeric data types.

```
height = getNumber(▼ "inputHeight");
weight = getNumber(▼ "inputWeight");
```

❖ The following equation is used to calculate BMI.

$$BMI = weight\ (kg)\ /\ High^2$$

```
bmi = (weight / (height * height));
bmi = Math.round(bmi);
```

This is where the BMI value is converted to the full number.

Now show the image based on the BMI value.

```
if( bmi < 18.5 ){
    setImageURL( ▼ "image1",  ▼ "underweight.png");
}
else if( bmi >= 18.5 && bmi < 24.9 ){
    setImageURL( ▼ "image1",  ▼ "Normal.png");
}
else if( bmi >= 24.9 && bmi < 29.9 ){
    setImageURL( ▼ "image1",  ▼ "OverWeight.png");
}
else if( bmi >= 29.9 && bmi < 34.9 ){
    setImageURL( ▼ "image1",  ▼ "Obese.png");
}
else if( bmi >= 34.9 ){
    setImageURL( ▼ "image1",  ▼ "ExtremelyObese.png");
}
    - +
```

❖ Now assign the following values to the labels in screen2.

```
setText( ▼ "labelID", ("ID : " + getText( ▼ "inputID")) );

setText( ▼ "labelName", ("Name : " + getText( ▼ "inputName")) );

setText( ▼ "labelAge", "Age : " + age );

setText( ▼ "labelBMI", "BMI : " + bmi );

setScreen( ▼ "screen2");
```