

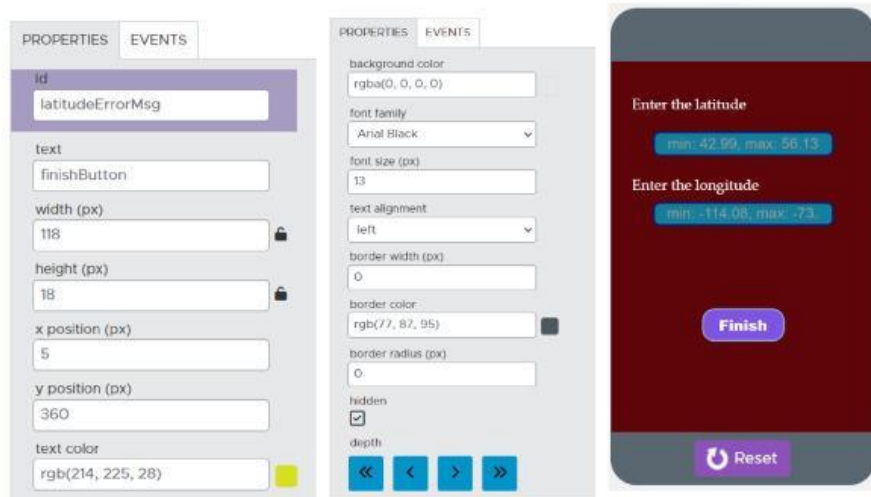


ARTIFICIAL INTELLIGENCE
AND MACHINE LEARNING

කෘත්‍රිම බුද්ධිය හා යන්ත්‍ර ඉගෙනීම

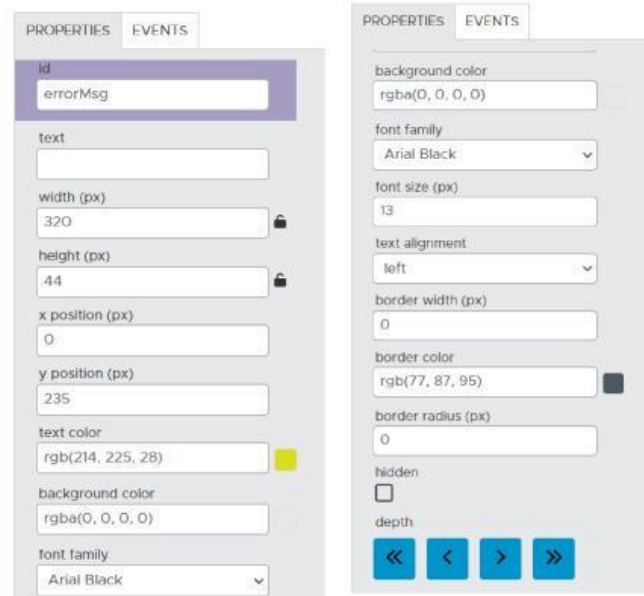


- ❖ Let's further develop the app we created in homework 171 here.
- ❖ Now go to screen4.
- ❖ Now add a button for this screen.
- ❖ Give finishButton as id of Button.
- ❖ Adjust the properties of that button as follows.



- ❖ Here, the minimum value of the text input (inputLatitude) is 42.99 and the maximum value is 56.13. That is, when entering values that are not among those values, let's set an error message to be displayed.
- ❖ Then Invalid latitude for the text. Give the Latitude value should be between 42.99 and 56.13.
- ❖ And the minimum value of the text input (inputLongitude) is -114.08 and the maximum value is -73.58 according to the longitude. That is, when entering values that are not among those values, let's set an error message to be displayed.
- ❖ Then Invalid longitude for the text. Give the Longitude value should be between -114.08 and -73.58.
- ❖ Add a label for the error messages.
- ❖ Give its id errorMsg.

- ❖ Leave the text of the label blank. Because let's display the error message according to the input values.
- ❖ Now give the following properties for that label.



- ❖ Now when the finish button is clicked, display the error message according to the input values on that screen.
- ❖ First make screen4 the default screen.
- ❖ Now create the variable to assign the value of inputLatitude.

```
var latitude = 0;
```

- ❖ Now when the finish button is clicked, assign the value of inputLatitude to the latitude variable.

```
onEvent(▼ "finishBtn", ▼ "click", function() {
    latitude = getNumber(▼ "inputLatitude");
});
```

- ❖ Now if the value of the latitude variable is not between 42.99 and 56.13, let's set an error message to be displayed.

```
onEvent(▼"finishBtn", ▼"click", function() {  
  latitude = getNumber(▼"inputLatitude");  
  if ( latitude < 42.99 || latitude > 56.13 ) {  
    setText(▼"errorMsg", "Invalid latitude. Latitude value should be between 42.99 and 56.13");  
    showElement(▼"errorMsg");  
  }  
});
```

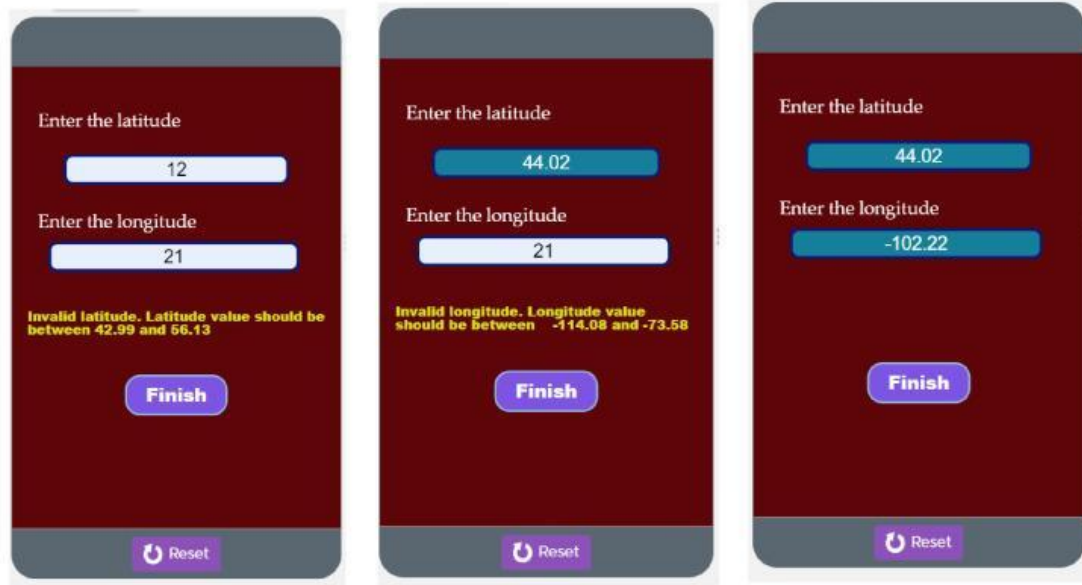
- ❖ Now create the variable to assign the value of inputLongitude.

```
var latitude = 0;  
var longitude = 0;
```

- ❖ Now when the finish button is clicked, assign the value of inputLongitude to the longitude variable.
- ❖ Now, if the value of the longitude variable is not between -114.08 and -73.58, let's set an error message to be displayed.

```
onEvent(▼"finishBtn", ▼"click", function() {  
  latitude = getNumber(▼"inputLatitude");  
  longitude = getNumber(▼"inputLongitude");  
  if ( latitude < 42.99 || latitude > 56.13 ) {  
    setText(▼"errorMsg", "Invalid latitude. Latitude value should be between 42.99 and 56.13");  
    showElement(▼"errorMsg");  
  }  
  else if ( longitude < -114.08 || longitude > -73.58 ) {  
    setText(▼"errorMsg", "Invalid longitude. Longitude value should be between -114.08 and -73.58");  
    showElement(▼"errorMsg");  
  }  
  else {  
    hideElement(▼"errorMsg");  
  }  
});
```

- ❖ Then the error message will be displayed as below.



- ❖ Now add a screen to display the predicted apartment price.



- ❖ Now add a label to that screen and display the properties as below.

- ❖ Add a label like below to display the price.

- ❖ In screen 3, according to the radio button, code as follows to get whether the den is 1 or 0.

```

var den;

onEvent(▼"screen3NextButton", ▼"click", function() {
  if( getChecked("radioBtnDenYes") ) {
    den = 1;
  }
  else{
    den = 0;
  }
  setScreen(▼"screen4");
});

```

- ❖ Now let's prepare the function to predict the apartment price when the Finish button is clicked.

```

var data = {};

function predictPrice() {
  addPair(data, "Bedroom", getText(▼"Bedroom_dropdown"));
  addPair(data, "Bathroom", getText(▼"Bathroom_dropdown"));
  addPair(data, "Den", den);
  addPair(data, "Lat", latitude);
  addPair(data, "Long", longitude);
  setText(▼"labelPrice", '');
  getPrediction("apartmentRentPriceModel", "OVPkHkYllwV8", data, function(value) {
    setText(▼"labelPrice", value);
  });
}

```

❖ Now call this function.

```
onEvent(▼"finishBtn", ▼"click", function() {  
  latitude = getNumber(▼"inputLatitude");  
  longitude = getNumber(▼"inputLongitude");  
  if ( latitude < 42.99 || latitude > 56.15 ) {  
    setText(▼"errorMsg", "Invalid latitude. Latitude value should be between 42.99 and 56.13");  
    showElement(▼"errorMsg");  
  }  
  else if ( longitude < -114.08 || longitude > -73.58 ) {  
    setText(▼"errorMsg", "Invalid longitude. Longitude value should be between -114.08 and -73.58");  
    showElement(▼"errorMsg");  
  }  
  else {  
    hideElement(▼"errorMsg");  
    predictPrice();  
    setScreen(▼"screen5");  
  }  
});
```