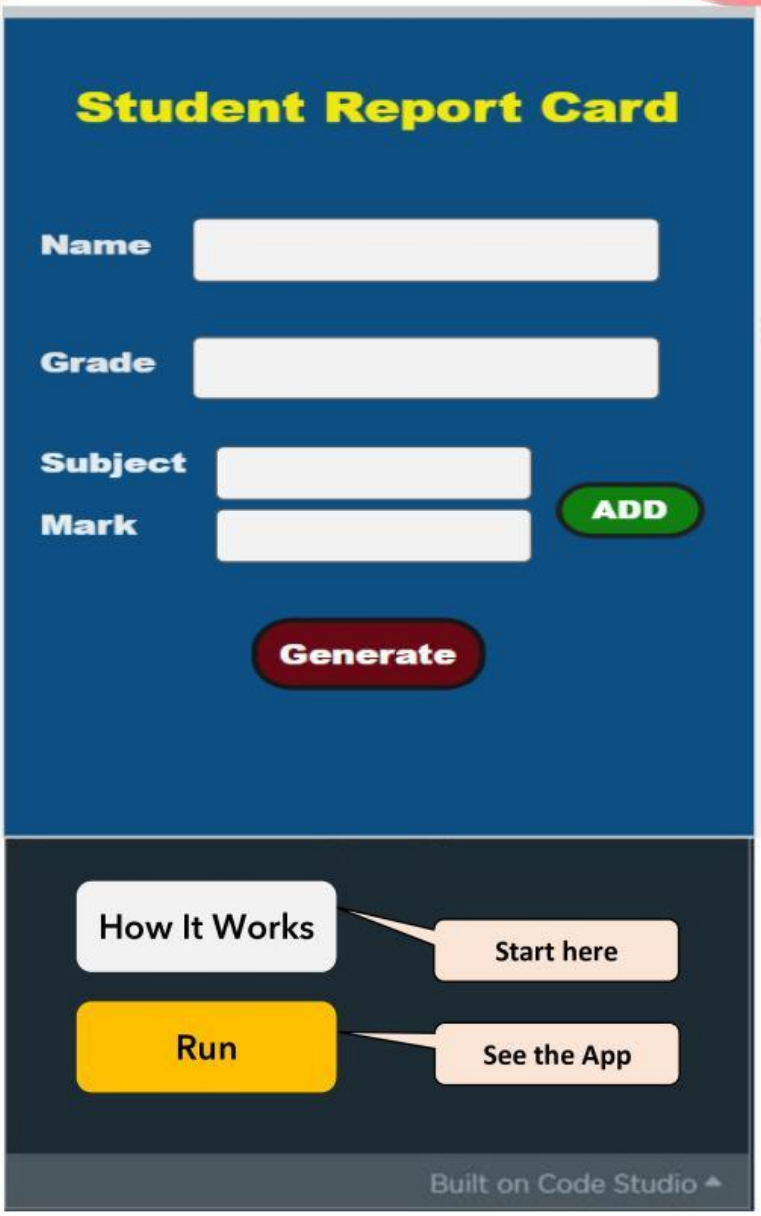
Project 80

DP EDUCATION

Coding School



LIVEWORKSHEETS

❖ Let's create a Student Report Card using Array.

Create Screen1 so that Name is grade and marks are given for each subject.

Create two arrays and add two separate arrays for subject and marks.

When the generate button is clicked, you should go to Screen 2 and calculate and display the total mark and average.

❖ All the design related to the app has been given to you.

❖ First, create the following variables to be calculated.

```
var markOfSub;
var sub;
var len;
var total = 0;
var ave = 0;
```

❖ Create an array as subject to add the subjects added in Screen1. Create an array as mark to add marks.

```
var subject = [];
var mark = [];
```

❖ When the Add button is clicked, data should be added to the arrays.

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- When the Add button is clicked once, the entered subject should be added to the subject array and the entered marks should be added to the mark array.

- The following code block in the variables control is used to add new data to the array.

```
appendItem(list, "f");
```

Name of Array. — The newly added value

- Code as below for the click of Add button.

```
onEvent(▼"buttonAdd", ▼"click", function( ) {
    sub = getText(▼"inputSubject");
    markOfSub = getNumber(▼"inputMark");
    appendItem(subject, sub);
    appendItem(mark, markOfSub);
    setText(▼"inputSubject", "");
    setText(▼"inputMark", "");
});
```

Assign the entered subjects and marks to the sub and markOfSub variables created above.

Add the value of the sub variable to the subject array and the value of the markOfSub variable to the mark array.

Use this code block to clear the input values in the "inputSubject" and "inputMark" text indexes after clicking the add button.

- After clicking the generate button, the child should calculate the total mark and the average. And the subject and mark in which the child scored the highest should be displayed.

- First, get the length of the mark array to get the total mark. Assign that length to the "len" variable.

- Create two variables as "highestMarks" and "highestMarksSub" to get the subject and mark in which the child scored the highest. Also assign the first element of the mark array to the value of the "highestMarks" variable and the first element of the subject array to the value of the "highestMarksSub" variable.

- Create a for loop and code to get the total mark of the subject with the highest marks and the mark.

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```
onEvent(▼"buttonGenerate", ▼"click", function() {
  len = mark.length;
  var highestMarks = mark[0];
  var highestMarksSub = subject[0];
  for(var i = 0; i < len; i++){
    total = total + mark[i];
    if(highestMarks < mark[i]){
      highestMarks = mark[i];
      highestMarksSub = subject[i];
    }
  }
```

Get the highest score in the same way as the largest number in an array and get the subject who scored the highest score in the values of i at that time.

❖ Calculate the average using the total mark and the length of the mark array.

```
ave = total / len;
ave = Math.round(ave);
```

❖ Now set the values to the labels below.

```
  setText(▼"labelTotal", "Total : " + total);
  setText(▼"labelAverage", "Average : " + ave);
  setText(▼"labelHighestMark", highestMarksSub + " is the subject with the highest marks. That mark is " + highestMarks);
  setText(▼"labelName", getText(▼"inputName"));
  setText(▼"labelGrade", getText(▼"inputGrade"));
  setScreen(▼"screen2");
});
```

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