STIW2044: Mobile Programming
Semester A222
School of Computing, CAS, UUM

FRONT COVER

Lab Assignment 1

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GitHub Link	https://github.com/Haikal283950/STIW2044_Lab-Assignment-1
Submission Date	3/5/2023
Acknowledgment	I hereby signed and acknowledge that the following works are from my effort in submitting this document. If found otherwise, severe action such as marks deduction or removal from the assignment can be taken against me.
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Application Description

Develop a simple application that can search and extract country information using API from https://api-ninjas.com/api/country. Request for an API key from provider and once registered test your API and it should return a JSON data response. Based on the response build an application that allows users to search and display the country data. Use https://flagsapi.com/ API to display country flag.

SUBMISSION

Instruction 1 – Develop the application using Flutter SDK

Develop the application using the application described above.

1. GitHub link to your project (Don't set it as private)

   https://github.com/Haikal283950/STIW2044_Lab-Assignment-1

2. YouTube video link (Don't set it as private)

   https://youtu.be/4-9oHuz0b5A

Instructions 2 – Once instruction 1 completed answer all the following questions. The following questions will only count and check if the above full source code and video are available. Your answers should only come from your own code. Only shows the required code segment and any additional codes added to the answer will consider as the wrong answer.

Questions.

1. Show the code segment where dynamic object retrieves country JSON data from HTTP request.

(1 Marks)

```
Answer :
_loadStatistics(String selectedLocation) async {
  var api_key = "1BpB0W1pSVpF7OuIFW8WWw==itG3rhVqgeeD7pbJ";
  var url =
      Uri.parse('https://api.api-
ninjas.com/v1/country?name=$selectedLocation');
  var response = await http.get((url), headers: {'X-Api-Key':
api_key});
  var rescode = response.statusCode;
  if (rescode == 200) {
    // Number 1
    // Retrieve and decode JSON Data
    var data = json.decode(response.body);
    if (data is List && data.isNotEmpty) {
      // Put JSON data in an array
      var countryData = data[0];
```

2. Show the code segment where the app retrieved country capital from the decoded JSON data object. (Only the requested widget code)

(1 Marks)

```
Answer :
// Number 2
      // Create instance of a capital country data from the decoded
JSON
      var capital = countryData['capital'];
```

3. Show the code segment where the app retrieved currency name from the decoded JSON data object. (Only the requested widget code)

(1 Marks)

Answer :

```
// Number 3
      // Create instance of a currency name data from the decoded
JSON
      var currencyName = countryData['currency']['name'];
```

4. Show the code segment where the logic handling if the search country is not found. (Only show the required codes).

(2 Marks)

Answer :

```
if (data is List && data.isNotEmpty) {
// If condition code goes here
// Number 4, an else condition if the first condition is not found
   } else {
     return "Country is not found!";
   }
```

5. Show the string concatenation for the flag URL.

(2 Marks)

Answer :

```
// Number 5, Instantiating the flag iso for the link that will
conduct a network.image
flagIso = "https://flagsapi.com/${country.iso2}/flat/64.png";
               showFlag = true;
```

6. Screenshot of your application User Interface (before and after HTTP request)

(3 Marks)

Before	After