ASSIGNMENT 10

Subject: Smart Device Programming

Submitted To:

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CE Department

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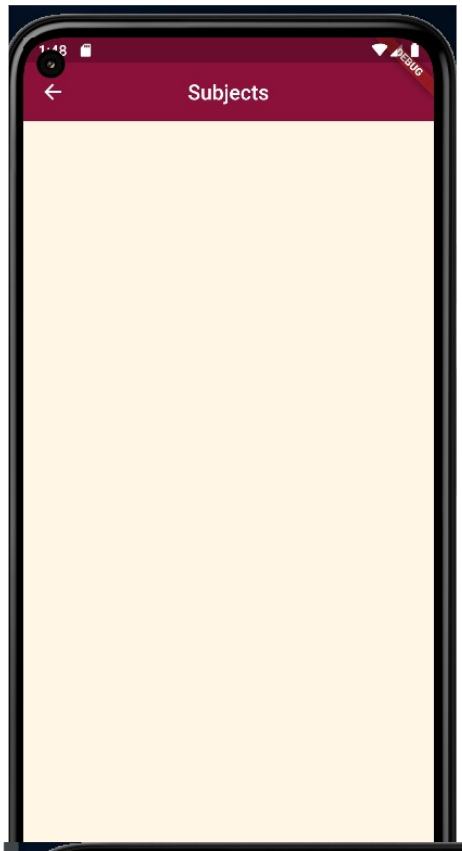
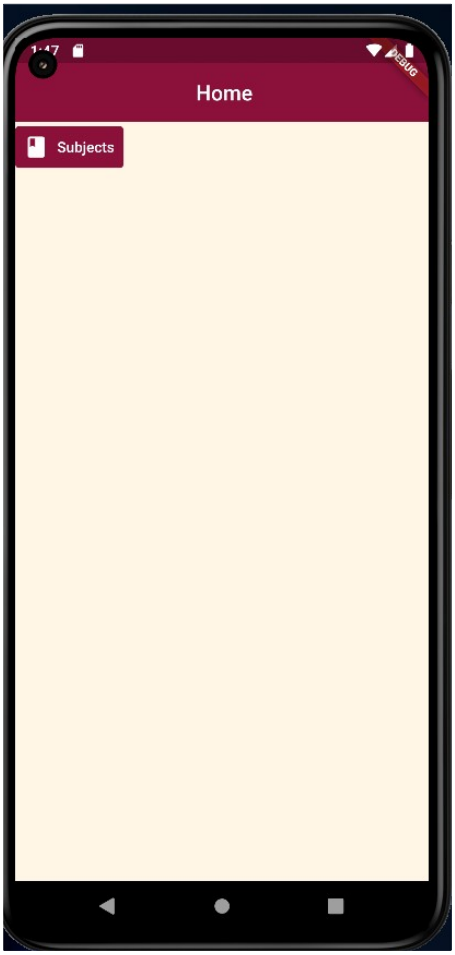
```dart
@override
Widget build(BuildContext context) {
  print('Build in subjects');
  return Scaffold(
    backgroundColor: Color(0xffFFF5E4),
    appBar: AppBar(
      title: Text('Subjects'),
      centerTitle: true,
      backgroundColor: Color(0xff850E35),
      elevation: 0.0,
    ),  // AppBar
    body: ElevatedButton(
      onPressed: (){
        setState(() {
          _count += 1;
        });
      },
      style: ElevatedButton.styleFrom(
        primary: Color(0xffFFC4C4), // Background color
      ),
      child: Text('Total Subjects : $_count '),
    ),  // ElevatedButton
  );  // Scaffold
}
```

```dart
Widget build(BuildContext context) {
  return Scaffold(
    backgroundColor: Color(0xffFFF5E4),
    appBar: AppBar(
      title: Text(' Home'),
      centerTitle: true,
      backgroundColor: Color(0xff850E35),
      elevation: 0.0,
    ),  // AppBar
    body: Column(
      children: [
        TextButton.icon(
          onPressed: () {
            Navigator.pushNamed(context,'/sub');
          },
          icon: Icon(Icons.book),
          label: Text('Subjects'),
          style: TextButton.styleFrom(
            primary: Colors.white,
            backgroundColor: Color(0xff850E35), // Background Color
          ),
        ),  // TextButton.icon
      ],
    ),  // Column
  );  // Scaffold
```

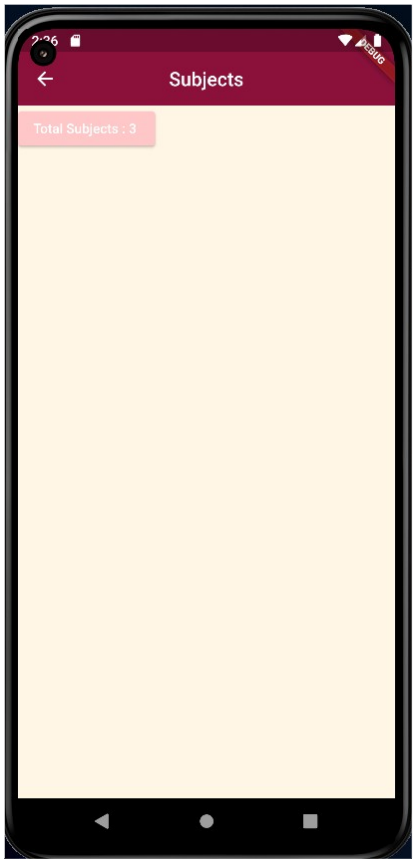
Subjects.dart

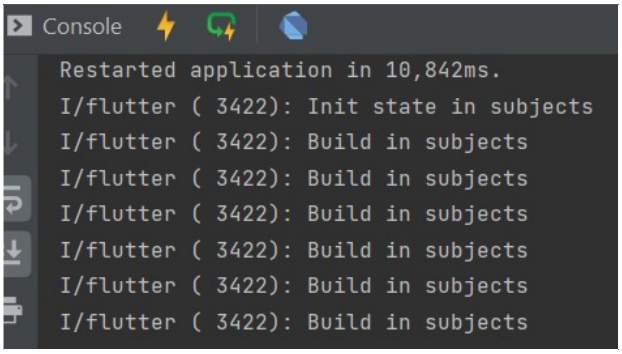


home.dart

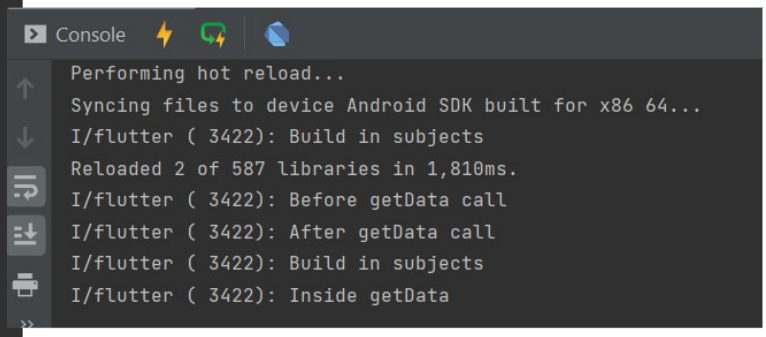


We have set counter such that each time we will press button it will increment number of subjects and print line in colsole.

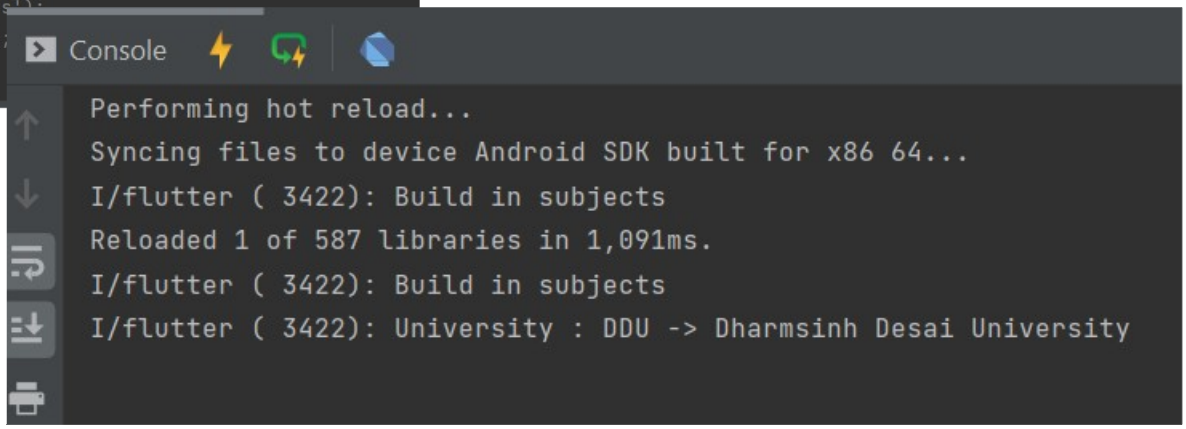





```
void getData() async {
  /*Future.delayed(Duration(seconds: 4),() {
    print('University : DDU');
  }
  );*/
  String username = await Future.delayed(Duration(seconds: 4), () {
    return 'University : DDU';
  });

  /*Future.delayed(Duration(seconds: 2),() {
    print('Dharmsinh Desai University');
  }
  );*/

  String bio = await Future.delayed(Duration(seconds: 2), () {
    return 'Dharmsinh Desai University';
  });

  print('$username -> $bio');

}

@override
void initState() {
  //super.initState();
  //print('Init state in subjects');
  //print('Before getData call');
  getData();
  //print('After getData call');
```



Using async await output would be as below:



Now we will use fake api for json. Below is the code for that. In

code, we have defined one method using async await in order to get synchronized outout. The final output would be shown in console.

First print statement will print whole response fetched by api. Then second statement will print data part. In third statement we are printing only title from all the data.

Add this code into pubspec.yaml in order to include http package.

```
dependencies:
  flutter:
    sdk: flutter
  http: ^0.13.5
```

```
class _LoadingState extends State<Loading> {
  void getData() async {
    final response = await get(Uri.parse('https://jsonplaceholder.typicode.com/albums/1'));
    print(response.body);

    Map data = jsonDecode(res
    print(data);
    print(data['title']);
  }

  @override
  void initState() {
    // TODO: implement initSt
    super.initState();
    getData();
  }
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Color(0xffFFF5E4),
      appBar: AppBar(
        title: Text(' Loading Screen'),
        centerTitle: true,
        backgroundColor: Color(0xff850E35),
        elevation: 0.0,
      ),  // AppBar
    );  // Scaffold
```

```
Run:  main.dart
Console
Restarted application in 7,290ms.
I/flutter ( 3888): {
I/flutter ( 3888):   "userId": 1,
I/flutter ( 3888):   "id": 1,
I/flutter ( 3888):   "title": "quidem molestiae e
I/flutter ( 3888): }
I/flutter ( 3888): {userId: 1, id: 1, title: quic
I/flutter ( 3888): quidem molestiae enim
```

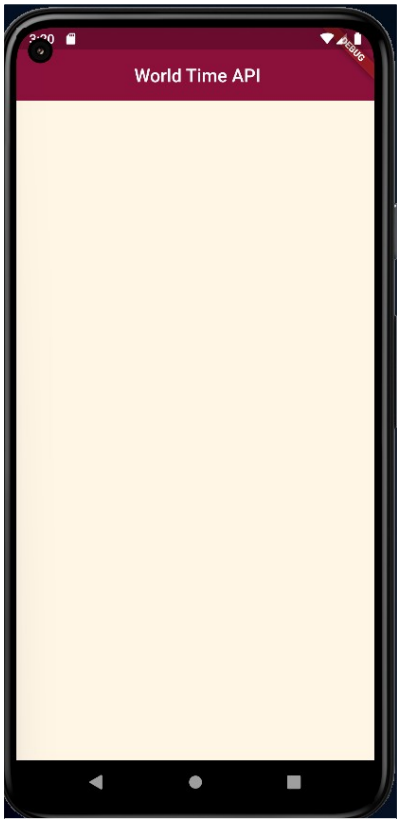
World Time API

```
Console
Performing hot restart...
Syncing files to device Android SDK built for x86 64...
Restarted application in 5,217ms.
I/flutter ( 3888): {abbreviation: IST, client_ip: 2409:4041:2cba:4387:311d:36ee:a17a:c76b, datetime: 2022-09-17T15:19:28
 .924838+05:30, day_of_week: 6, day_of_year: 260, dst: false, dst_from: null, dst_offset: 0, dst_until: null, raw_offset: 19800,
  timezone: Asia/Kolkata, unixtime: 1663408168, utc_datetime: 2022-09-17T09:49:28.924838+00:00, utc_offset: +05:30, week_number:
  37}
I/flutter ( 3888): 2022-09-17T15:19:28.924838+05:30
I/flutter ( 3888): +05:30
I/flutter ( 3888): 2022-09-17 09:49:28.924838Z
I/flutter ( 3888): 05
I/flutter ( 3888): 30
I/flutter ( 3888): 2022-09-17 15:19:28.924838Z
```

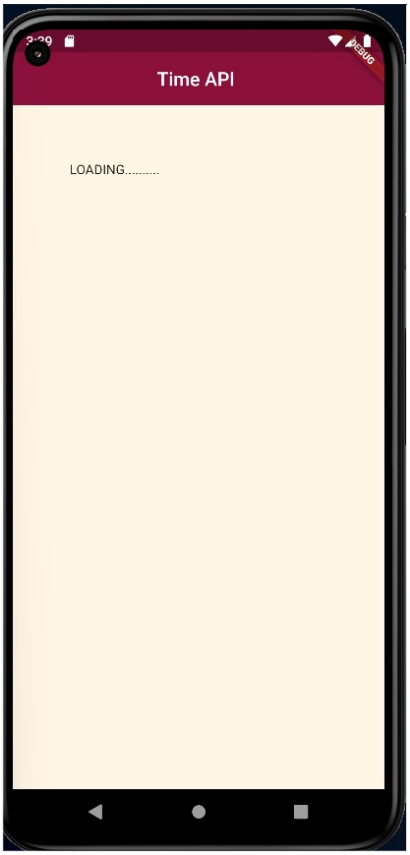
We can set any region. First we have retrived time of Kolcutta, Then Salata.

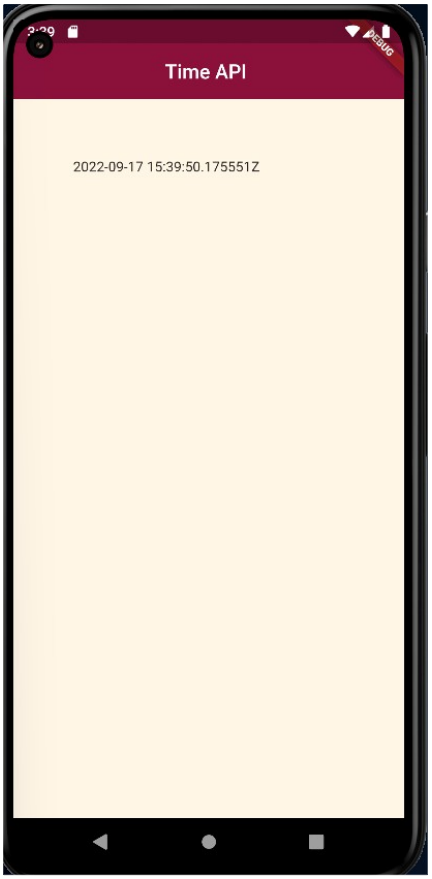
Now we will print this time on our device screen. For that create two files and add below code into it.

```
Console
Performing hot restart...
Syncing files to device Android SDK built for x86 64...
Restarted application in 1,292ms.
I/flutter ( 3888): {abbreviation: -03, client_ip: 2409:4041:2cba:4387:311d:36ee:a17a:c76b, datetime: 2022-09-17T06:54:49
 .387403-03:00, day_of_week: 6, day_of_year: 260, dst: false, dst_from: null, dst_offset: 0, dst_until: null, raw_offset:
 -10800, timezone: America/Argentina/Salta, unixtime: 1663408489, utc_datetime: 2022-09-17T09:54:49.387403+00:00, utc_offset:
 -03:00, week_number: 37}
I/flutter ( 3888): 2022-09-17T06:54:49.387403-03:00
I/flutter ( 3888): -03:00
I/flutter ( 3888): 2022-09-17 09:54:49.387403Z
I/flutter ( 3888): 03
I/flutter ( 3888): 00
I/flutter ( 3888): 2022-09-17 12:54:49.387403Z
```



```dart
class WordTime {
  String? location;
  String? time;
  String? flag;
  String? url;

  WordTime({ this.location,this.flag,this.url });
  Future<void> getTime() async {
// Make Request for time and receive response
    Response response = await
    get(Uri.parse('http://worldtimeapi.org/api/timezone/$url')); // Asia/Kolkata
    Map timeData = jsonDecode(response.body);
// Get particular property form timeData...
    String dateTime = timeData['datetime'];
    String offset = timeData['utc_offset']; //not dst_offset
    String offsetHours = offset.substring(1,3);
    String offsetMinutes = offset.substring(4,6);
// create DateTime object
    DateTime currenttime = DateTime.parse(dateTime);
    currenttime = currenttime.add(
        Duration(minutes:
        int.parse(offsetMinutes),hours:int.parse(offsetHours)));
//set the time property of class...
    time = currenttime.toString();
  }
```





GitHub Link:

https://github.com/TulsiLukhi1/Smat-Device-Programming/tree/master/Lab10