

Dharmsinh Desai University, Nadiad
Faculty of Technology
Department of Computer Engineering



ASSIGNMENT 12

Subject: Smart Device Programming

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We will continue our clock app from previous lab. Now we will add background image in it based on current time. For time 6 AM to 8 PM we can set background image of day and otherwise night. This can be done through Boolean variables.

Add the below Boolean variable `isDayTime` in `time.dart` file.

```
Duration(minutes: int.parse(offsetMinutes), hours: int.parse(offsetHours)));

isDayTime = (currenttime.hour>6 && currenttime.hour<20) ? true : false;
time = DateFormat.jm().format(currenttime);
}
```

Now, in `home.dart` file set background image based on this variable.

```
print(data);
// set background images
String bgImage = data['isDayTime'] ? 'day.png' : 'night.png';
Color? appBgColor = data['isDayTime'] ? Color(0xffffae4bb) : Colors.indigo[800];
return Scaffold(
```

```
return Scaffold(
  backgroundColor: appBgColor,
  body: SafeArea(
    child: Container (
      decoration: BoxDecoration(
        image: DecorationImage(
          image: AssetImage('assets/images/$bgImage'),
          fit: BoxFit.cover,
        ) // DecorationImage
      ), // BoxDecoration
    ), // SafeArea
  ), // Scaffold
);
```

And similarly make changes in `loading.dart` file

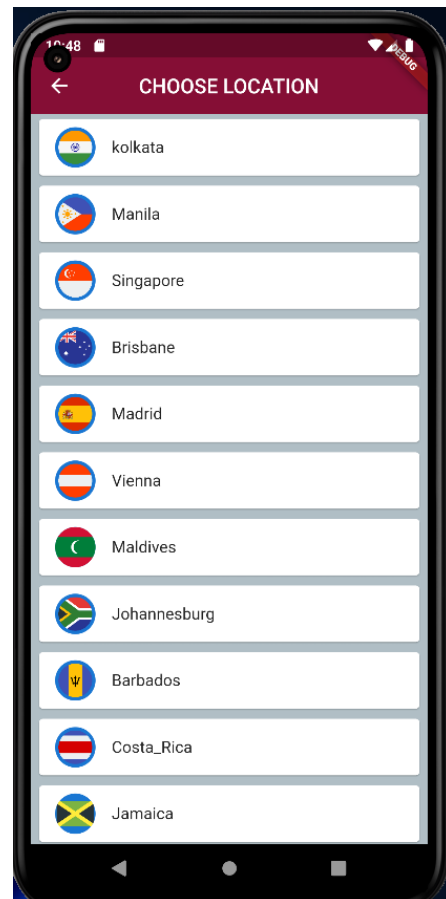
```
class _LoadingState extends State<Loading> {
  // String? time = 'LOADING.....';
  void setWorldTime() async {
    WordTime timeinstance =
      WordTime(location: 'kolkata', flag: 'india.png', url: 'Asia/Kolkata');
    await timeinstance.getTime();
    Navigator.pushNamed(context, '/home', arguments: {
      'location' : timeinstance.location,
      'flag' : timeinstance.flag,
      'time' : timeinstance.time,
      'isDayTime' : timeinstance.isDayTime,
    });
  }
}
```

Add below code in pubspec.yaml file and add necessary images and flags for that.

```
# To add assets to your application
assets:
  - assets/images/
  - assets/flags/
#   - images/a_dot_ham.jpeg
```

```
main.dart × choose_location.dart × loading.dart × time.dart × home.dart × pubspec.yaml ×
10 class _ChooseLocationState extends State<ChooseLocation> {
11   int counter = 0;
12   List<WordTime> locations = [
13     WordTime(location: 'kolkata', flag: 'india.png', url: 'Asia/Kolkata'),
14     WordTime(location: 'Manila', flag: 'philippines.png', url: 'Asia/Manila'),
15     WordTime(location: 'Singapore', flag: 'singapore.png', url: 'Asia/Singapore'),
16     WordTime(location: 'Brisbane', flag: 'australia.png', url: 'Australia/Brisbane'),
17     WordTime(location: 'Madrid', flag: 'spain.png', url: 'Europe/Madrid'),
18     WordTime(location: 'Vienna', flag: 'austria.png', url: 'Europe/Vienna'),
19     WordTime(location: 'Maldives', flag: 'maldives.png', url: 'Indian/Maldives'),
20     WordTime(location: 'Johannesburg', flag: 'south-africa.png', url: 'Africa/Johannesburg'),
21     WordTime(location: 'Barbados', flag: 'barbados.png', url: 'America/Barbados'),
22     WordTime(location: 'Costa_Rica', flag: 'costa-rica.png', url: 'America/Costa_Rica'),
23     WordTime(location: 'Jamaica', flag: 'jamaica.png', url: 'America/Jamaica'),
24     WordTime(location: 'Phoenix', flag: 'usa.png', url: 'America/Phoenix'),
25     WordTime(location: 'Broken_Hill', flag: 'australia.png', url: 'Australia/Broken_Hill'),
26     WordTime(location: 'Moscow', flag: 'russia.png', url: 'Europe/Moscow'),
27   ];
28   void updateTime(index) async {
29     WordTime instance = locations[index];
30     await instance.getTime();
31   } // navigate to home screen by popping instead of pushing new replica
32   // of home screen
33   Navigator.pop(context, {
34     'location' : instance.location,
35     'flag' : instance.flag,
36     'time' : instance.time,
37     'isDayTime' : instance.isDayTime,
```

Now when we click on edit location the below page would be displayed.



```

    IconButton(
      onPressed: () async {
        dynamic result = await Navigator.pushNamed(context, '/location');
        setState(() {
          data = {
            'time': result['time'],
            'location': result['location'],
            'isDayTime': result['isDayTime'],
            'flag': result['flag'],
          };
        });
      },
      icon: Icon(
        Icons.edit_location,
        color: Colors.black87,
      ), // Icon

```

Make some changes in home.dart file again that will change data of current location based on our choice and would display time according to that.

```

Widget build(BuildContext context) {
  data = data.isNotEmpty ? data : ModalRoute.of(context)?.settings.arguments as Map;
  print(data);

```

If we choose Manila from the list of locations result would be as shown in the image.

At last we will check our code for the day time. For that currently we are changing criteria for displaying day image.

```
DateTime currenttime = DateTime.parse(dateTime);  
currenttime = currenttime.add(  
    Duration(minutes: int.parse(offsetMinutes), hours: int.parse(offsetHours)));  
  
isDayTime = (currenttime.hour>6 && currenttime.hour<24) ? true : false;  
time = DateFormat.jm().format(currenttime);  
}
```

Result:



GitHub repository link:

[Click here](#)

