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Batch: A4 Lab: 12

GitHub link: https://github.com/MurtazaMister/CE071_SDP/blob/master/Lab12

Main.dart

```
import 'package:flutter/material.dart';

import 'pages/choose_location.dart';
import 'pages/home.dart';
import 'pages/loading.dart';

void main() => runApp(MaterialApp(
  debugShowCheckedModeBanner: false,
  initialRoute: '/loading',
  routes: {
    '/': (context) => Loading(),
    '/home': (context) => Home(),
    '/location': (context) => ChooseLocation(),
    '/loading': (context) => Loading(),
  }
));
```

World_time.dart

```
import 'package:http/http.dart';
import 'dart:convert';
import 'package:intl/intl.dart';

class WordTime {
  String? location; // REAL LOCATION NAME FOR UI
  String? time; // the time in that location..
  String? flag; // flag images related to location country...do it your self
  String? url; // end point of static url...which will change every time when

  bool? isDayTime; // for day time background image setting
  WordTime({this.location, this.flag, this.url});

  Future<void> getTime() async {
    try {
      // 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...
        isDayTime =
            (currenttime.hour > 11 && currenttime.hour < 20) ? true : false;
        time = DateFormat.jm().format(currenttime);
// time = currenttime.toString();
    } catch (e) {
        print('caught error : $e ');
        time = 'could not get time data';
    }
}
}
}

```

Loading.dart

```

import 'package:flutter/material.dart';
import 'package:lab_12/Services/world_time.dart';
import 'package:flutter_spinkit/flutter_spinkit.dart';

class Loading extends StatefulWidget {
  @override
  State<Loading> createState() => _LoadingState();
}

class _LoadingState extends State<Loading> {
  void setWorldTime() async {
    WordTime timeinstance =
        WordTime(location: 'India', flag: 'india.png', url: 'Asia/Kolkata');
    await timeinstance.getTime();
    Navigator.pushReplacementNamed(context, '/home', arguments: {
      'location' : timeinstance.location,
      'flag' : timeinstance.flag,
      'time' : timeinstance.time,
      'isDayTime' : timeinstance.isDayTime,
    });
  }
  @override
  void initState() {
    super.initState();
    setWorldTime();
  }
}

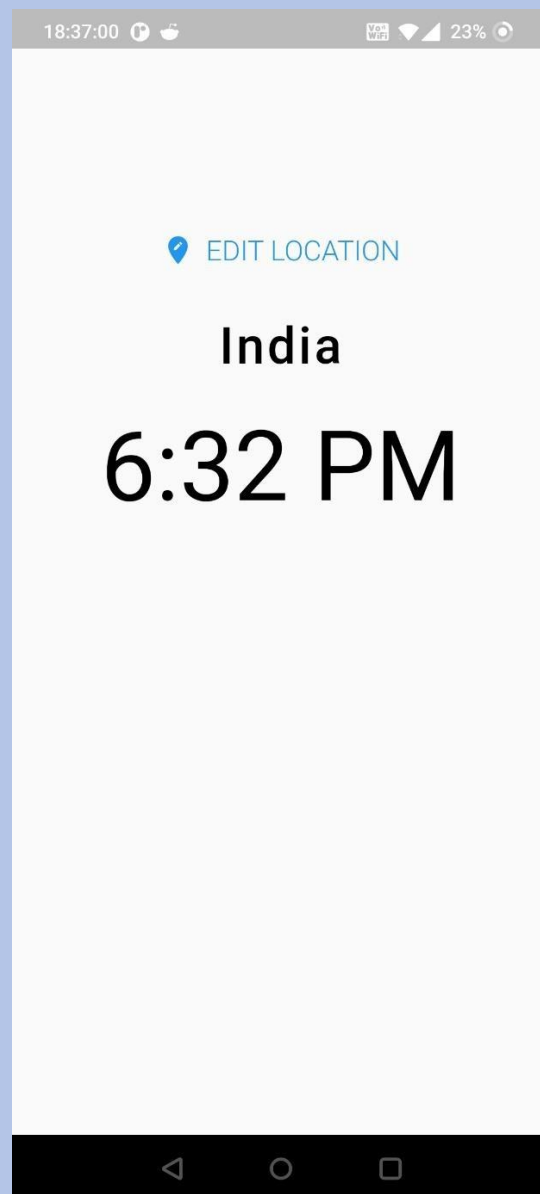
```

```

}

@override
Widget build(BuildContext context) {
  return Scaffold(
    backgroundColor: Colors.deepPurpleAccent,
    body: Center(
      child: SpinKitFadingCube(
        color: Colors.white,
        size: 90.0,
      ),
    ),
  );
}
}

```



Home.dart

"Night.jpg"

```
import 'package:flutter/material.dart';

class Home extends StatefulWidget {
  @override
  State<Home> createState() => _HomeState();
}

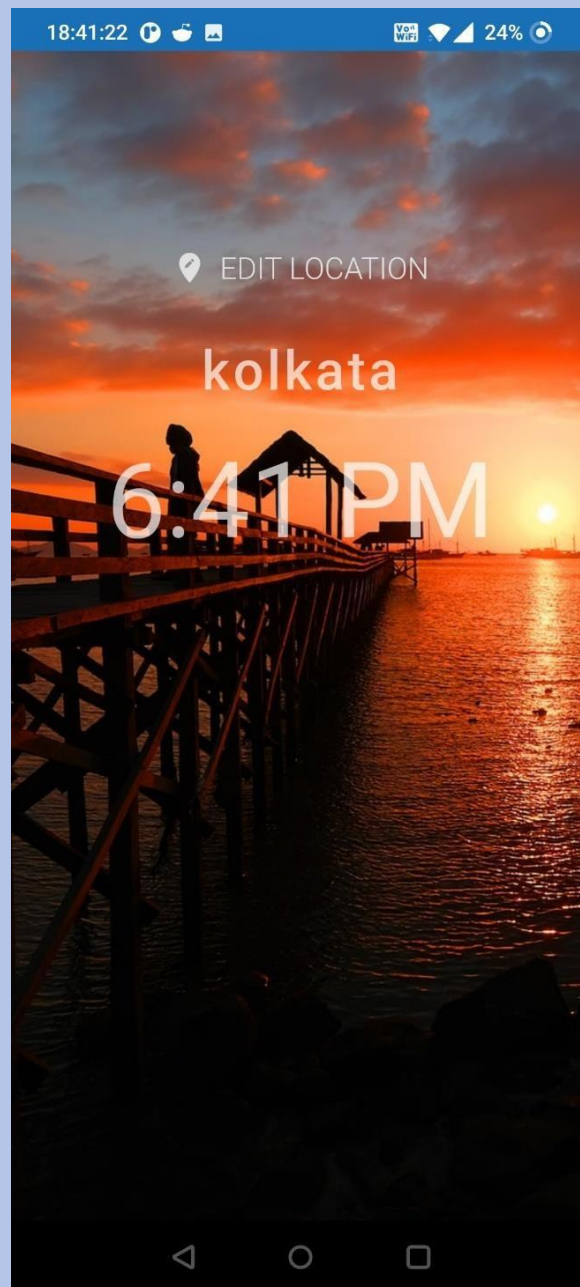
class _HomeState extends State<Home> {
  Map<dynamic, dynamic> data = {};
  @override
  Widget build(BuildContext context) {
    data = data.isNotEmpty
      ? data
      : ModalRoute.of(context)?.settings.arguments as Map;
    print(data);
    // set background images
    String bgImage = data['isDayTime'] ? 'mrng.jpg' : 'night.jpg';
    Color? appBgColor = data['isDayTime'] ? Colors.blue : Colors.indigo[900];
    return Scaffold(
      backgroundColor: appBgColor,
      body: SafeArea(
        child: Container(
          decoration: BoxDecoration(
            image: DecorationImage(
              image: AssetImage('assets/images/night.jpg'),
              fit: BoxFit.cover,
            ),
          ),
        child: Padding(
          padding: const EdgeInsets.fromLTRB(0.0, 120.0, 0.0, 0.0),
          child: Column(
            children: [
              TextButton.icon(
                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.location_on),
              ),
            ],
          ),
        ),
      ),
    );
  }
}
```

```

    },
    icon: Icon(
      Icons.edit_location,
      color: Colors.grey[300],
    ),
    label: Text(
      'EDIT LOCATION',
      style: TextStyle(
        color: Colors.grey[300],
        fontWeight: FontWeight.w300,
        fontSize: 20,
      ),
    ),
  ),
  SizedBox(height: 24.0),
  Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Text(
        data['location'],
        style: TextStyle(
          letterSpacing: 2.0,
          fontSize: 36.0,
          fontWeight: FontWeight.w500,
          color: Colors.white70,
        ),
      ),
    ],
  ),
  ),
  SizedBox(
    height: 24.0,
  ),
  Text(
    data['time'],
    style: TextStyle(
      fontSize: 70.0,
      color: Colors.white70,
    ),
  ),
),
],
),
),
)),
);
}
}

```



Home.dart

"Day.jpg"

```
import 'package:flutter/material.dart';

class Home extends StatefulWidget {
  @override
  State<Home> createState() => _HomeState();
```

```

}

class _HomeState extends State<Home> {
  Map<dynamic, dynamic> data = {};
  @override
  Widget build(BuildContext context) {
    data = data.isNotEmpty
      ? data
      : ModalRoute.of(context)?.settings.arguments as Map;
    print(data);
    // set background images
    String bgImage = data['isDayTime'] ? 'mrng.jpg' : 'night.jpg';
    Color? appBgColor = data['isDayTime'] ? Colors.blue : Colors.indigo[900];
    return Scaffold(
      backgroundColor: appBgColor,
      body: SafeArea(
        child: Container(
          decoration: BoxDecoration(
            image: DecorationImage(
              image: AssetImage('assets/images/day.jpg'),
              fit: BoxFit.cover,
            ),
          ),
        child: Padding(
          padding: const EdgeInsets.fromLTRB(0.0, 120.0, 0.0, 0.0),
          child: Column(
            children: [
              TextButton.icon(
                onPressed: () async {
                  dynamic result =
                    await Navigator.pushNamed(context, '/location');

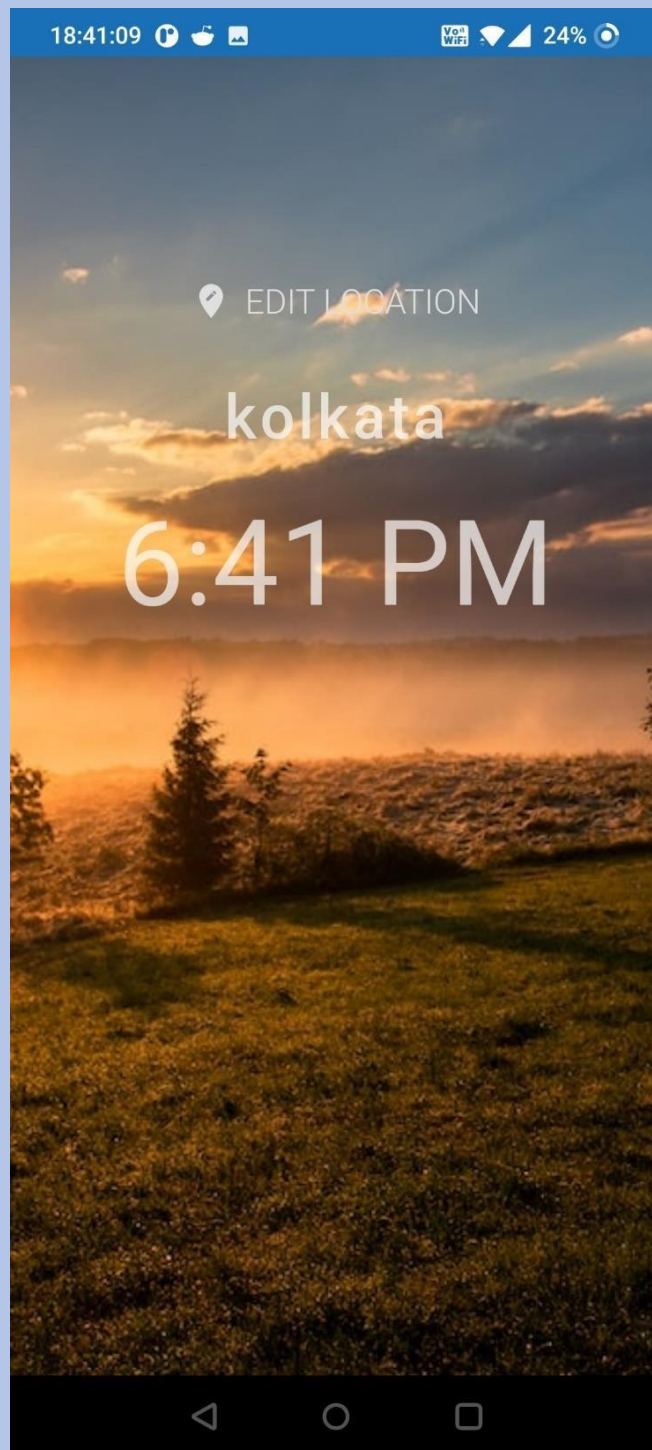
                  setState(() {
                    data = {
                      'time': result['time'],
                      'location': result['location'],
                      'isDayTime': result['isDayTime'],
                      'flag': result['flag'],
                    };
                  });
                },
                icon: Icon(
                  Icons.edit_location,
                  color: Colors.grey[300],
                ),
                label: Text(
                  'EDIT LOCATION',
                  style: TextStyle(
                    color: Colors.grey[300],

```

```

        fontWeight: FontWeight.w300,
        fontSize: 20,
      ),
    ),
  ),
  SizedBox(height: 24.0),
  Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Text(
        data['location'],
        style: TextStyle(
          letterSpacing: 2.0,
          fontSize: 36.0,
          fontWeight: FontWeight.w500,
          color: Colors.white70,
        ),
      ),
    ],
  ),
  ),
  SizedBox(
    height: 24.0,
  ),
  Text(
    data['time'],
    style: TextStyle(
      fontSize: 70.0,
      color: Colors.white70,
    ),
  ),
],
),
),
)),
);
}
}

```

Home.dart

“using \$bgImage”

```
import 'package:flutter/material.dart';

class Home extends StatefulWidget {
  @override
  State<Home> createState() => _HomeState();
```

```

}

class _HomeState extends State<Home> {
  Map<dynamic, dynamic> data = {};
  @override
  Widget build(BuildContext context) {
    data = data.isNotEmpty
      ? data
      : ModalRoute.of(context)?.settings.arguments as Map;
    print(data);
    // set background images
    String bgImage = data['isDayTime'] ? 'mrng.jpg' : 'night.jpg';
    Color? appBgColor = data['isDayTime'] ? Colors.blue : Colors.indigo[900];
    return Scaffold(
      backgroundColor: appBgColor,
      body: SafeArea(
        child: Container(
          decoration: BoxDecoration(
            image: DecorationImage(
              image: AssetImage('assets/images/$bgImage'),
              fit: BoxFit.cover,
            ),
          ),
        child: Padding(
          padding: const EdgeInsets.fromLTRB(0.0, 120.0, 0.0, 0.0),
          child: Column(
            children: [
              TextButton.icon(
                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.grey[300],
                ),
                label: Text(
                  'EDIT LOCATION',
                  style: TextStyle(
                    color: Colors.grey[300],

```

```

        fontWeight: FontWeight.w300,
        fontSize: 20,
      ),
    ),
  ),
  SizedBox(height: 24.0),
  Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Text(
        data['location'],
        style: TextStyle(
          letterSpacing: 2.0,
          fontSize: 36.0,
          fontWeight: FontWeight.w500,
          color: Colors.white70,
        ),
      ),
    ],
  ),
  ),
  SizedBox(
    height: 24.0,
  ),
  Text(
    data['time'],
    style: TextStyle(
      fontSize: 70.0,
      color: Colors.white70,
    ),
  ),
],
),
),
)),
);
}
}

```

18:42:04

VoWiFi 24%

 EDIT LOCATION

kolkata

6:41 PM

Choose_location.dart

```
import 'package:flutter/material.dart';
import 'package:lab_12/Services/world_time.dart';

class ChooseLocation extends StatefulWidget {
  // const ChooseLocation({Key? key}) : super(key: key);
  @override
  State<ChooseLocation> createState() => _ChooseLocationState();
}

class _ChooseLocationState extends State<ChooseLocation> {
  int counter = 0;

  List<WordTime> locations = [
    WordTime(location: 'kolkata', flag: 'india.png', url: 'Asia/Kolkata'),
    WordTime(location: 'Manila', flag: 'philippines.png', url: 'Asia/Manila'),
    WordTime(
      location: 'Singapore', flag: 'singapore.png', url: 'Asia/Singapore'),
    WordTime(
      location: 'Brisbane', flag: 'australia.png', url:
'Australia/Brisbane'),
    WordTime(location: 'Madrid', flag: 'spain.png', url: 'Europe/Madrid'),
    WordTime(location: 'Vienna', flag: 'austria.png', url: 'Europe/Vienna'),
    WordTime(
      location: 'Maldives', flag: 'maldives.png', url: 'Indian/Maldives'),
    WordTime(
      location: 'Johannesburg',
      flag: 'south-africa.png',
      url: 'Africa/Johannesburg'),
    WordTime(
      location: 'Barbados', flag: 'barbados.png', url: 'America/Barbados'),
    WordTime(
      location: 'Costa_Rica',
      flag: 'costa-rica.png',
      url: 'America/Costa_Rica'),
    WordTime(location: 'Jamaica', flag: 'jamaica.png', url:
'America/Jamaica'),
    WordTime(location: 'Phoenix', flag: 'usa.png', url: 'America/Phoenix'),
    WordTime(
      location: 'Broken_Hill',
      flag: 'australia.png',
      url: 'Australia/Broken_Hill'),
    WordTime(location: 'Moscow', flag: 'russia.png', url: 'Europe/Moscow'),
  ];

  void updateTime(index) async {
    WordTime instance = locations[index];
    await instance.getTime();
  }
}
```

```

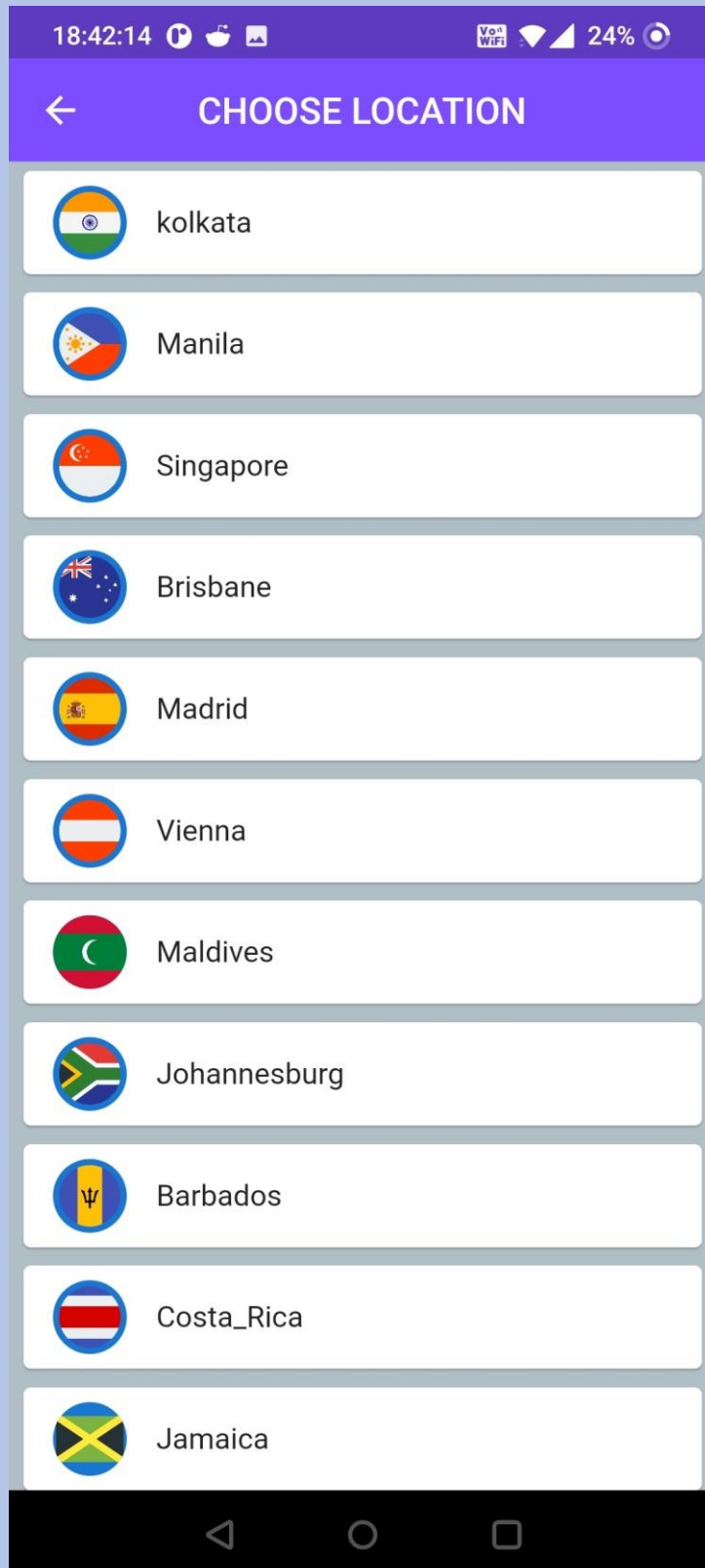
// navigate to home screen by popping instead of pushing new replica
// of home screen
    Navigator.pop(context, {
      'location': instance.location,
      'flag': instance.flag,
      'time': instance.time,
      'isDayTime': instance.isDayTime,
    });
  }

  @override
  Widget build(BuildContext context) {
    // print('BUILD FUNCTION RUN IN CHOOSE LOCATION...');
    return Scaffold(
      backgroundColor: Colors.blueGrey[200],
      // when we come/route from different screen IN APPBAR FLUTTER WILL DEFAULTLY
      // PLACED "BACK ARROW <- .....
      appBar: AppBar(
        backgroundColor: Colors.deepPurpleAccent,
        title: Text('CHOOSE LOCATION'),
        centerTitle: true,
        elevation: 0,
      ),

      body: ListView.builder(
        itemCount: locations.length,
        itemBuilder: (context, index) {
          return Padding(
            padding: const EdgeInsets.symmetric(vertical: 1.0, horizontal:
4.0),
            child: Card(
              child: ListTile(
                onTap: () {
                  updateTime(index);
                },
                title: Text(locations[index].location.toString()),
                leading: CircleAvatar(
                  backgroundImage:
                    AssetImage('assets/flags/${locations[index].flag}'),
                ),
              ),
            ),
          );
        },
      ),
    );
  }
}

```

}



18:42:22

VoWiFi 24%

EDIT LOCATION

Singapore

9:12 PM



18:42:32



Ver
WiFi



24%



EDIT LOCATION

Jamaica

6:12 PM



18:43:01



Von Wi-Fi 24%

 EDIT LOCATION

Brisbane

11:13 PM

