MUNZESTA SOLUTIONS

SHAHAB ALAM

Flutter App Development Course

DAY # 7

Task 1:

Source Code:

Main.dart

```
import 'package:flutter/material.dart';
import 'package:clima/screens/loading_screen.dart';

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      theme: ThemeData.dark(),
      home: LoadingScreen(),
    );
  }
}
```

city_screen.dart

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

```
import 'package:clima/utilities/constants.dart';
import 'package:font_awesome_flutter/font_awesome_flutter.dart';

class CityScreen extends StatefulWidget {
  @override
  _CityScreenState createState() => _CityScreenState();
}

class _CityScreenState extends State<CityScreen> {
  String cityName;

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: Container(
        decoration: BoxDecoration(
          image: DecorationImage(
            image: AssetImage('images/earth.jpg'),
            fit: BoxFit.cover,
          ),
        ),
        constraints: BoxConstraints.expand(),
        child: SafeArea(
          child: Column(
            children: <Widget>[


              SizedBox(height: 20,),


              Container(
```

```
  padding: EdgeInsets.all(30.0),
  child: TextField(
   style: TextStyle(
    color: Colors.cyan,
   ),
   decoration: kTextFieldInputDecoration,
   onChanged: (value) {
    cityName = value;
   },
  ),
 ),
 TextButton(
  onPressed: () {
   Navigator.pop(context, cityName);
  },
  child: Text(
   'Get Weather',
   style: kButtonTextStyle,
  ),
 ),


 Align(
  alignment: Alignment.center,
  child: TextButton(
   onPressed: () {
    Navigator.pop(context);
   },
   child: Row( mainAxisAlignment: MainAxisAlignment.center,
    children: [
```

```
                Icon(
                  FontAwesomeIcons.angleLeft,
                  size: 30.0,color: Colors.grey[700],
                ),

                Text("Back" , style: TextStyle(
                  fontSize: 25,
                  color: Colors.grey[700],
                  fontWeight: FontWeight.bold),),
              ],
            ),
          ),
        ),


        ],
      ),
    ),
  ),
 );
 }
}
```

Loading_screen.dart

```
import 'package:flutter/material.dart';
import 'location_screen.dart';
import 'package:flutter_spinkit/flutter_spinkit.dart';
import 'package:clima/services/weather.dart';

class LoadingScreen extends StatefulWidget {
```

```
 @override
 State<StatefulWidget> createState() {
  return _LoadingScreenState();
 }
}

class _LoadingScreenState extends State<LoadingScreen> {
 @override
 void initState() {
  super.initState();
  getLocationData();
 }

 void getLocationData() async {
  var weatherData = await WeatherModel().getLocationWeather();

  Navigator.push(context, MaterialPageRoute(builder: (context) {
   return LocationScreen(
    locationWeather: weatherData,
   );
  }));
 }

 @override
 Widget build(BuildContext context) {
  return Scaffold(
   body: Center(
    child: SpinKitSpinningLines(color: Colors.cyan , duration: Duration(seconds: 2),size: 120.0,)
   ),
  );
```

```
 }
}
```

Location_screen.dart

```
import 'package:flutter/material.dart';
import 'package:clima/utilities/constants.dart';
import 'package:clima/services/weather.dart';
import 'package:font_awesome_flutter/font_awesome_flutter.dart';
import 'city_screen.dart';
import 'package:intl/intl.dart';

class LocationScreen extends StatefulWidget {
 LocationScreen({this.locationWeather});

 final locationWeather;

 @override
 _LocationScreenState createState() => _LocationScreenState();
}

class _LocationScreenState extends State<LocationScreen> {
 WeatherModel weather = WeatherModel();
 int temperature;
 String weatherIcon;
 String cityName;
 String weatherMessage;
 String weatherDescription;
 String country;
```

```
// String now = DateFormat("yyyy-MM-dd").format

 @override
 void initState() {
  super.initState();

  updateUI(widget.locationWeather);
 }

 void updateUI(dynamic weatherData) {
  setState(() {
   if (weatherData == null) {
    temperature = 0;
    weatherIcon = 'Error';
    weatherMessage = 'Unable to get weather data';
    cityName = '';
    return;
   }
   double temp = weatherData["main"]["temp"];
    temperature = temp.toInt() ;
    print("Temperature : $temperature");


    var condition = weatherData["weather"][0]["id"];
    print("City ID : $condition");


    //  longitude = weatherData["coord"]["lon"];
```

```
    // print("City Longitude : $longitude");

    weatherDescription = weatherData["weather"][0]["description"];
    print("Weather Description : $weatherDescription");


     cityName = weatherData["name"];
    print("City Name : $cityName");

    country = weatherData["sys"]["country"];
    print("Country Name : $country");


    weatherIcon = weather.getWeatherIcon(condition);
    weatherMessage = weather.getMessage(condition);
  });
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    body: Container(
      decoration: BoxDecoration(
        image: DecorationImage(
          image: AssetImage('$weatherMessage'),
          fit: BoxFit.cover,
          colorFilter: ColorFilter.mode(
              Colors.white.withOpacity(0.8), BlendMode.dstATop),
        ),
      ),
```

```
constraints: BoxConstraints.expand(),
child: SafeArea(
 child: Column(
  // mainAxisAlignment: MainAxisAlignment.center,
  crossAxisAlignment: CrossAxisAlignment.stretch,
  children: <Widget>[
   Row(
    mainAxisAlignment: MainAxisAlignment.spaceBetween,
    children: <Widget>[
     TextButton(
      onPressed: () async {
       var weatherData = await weather.getLocationWeather();
       updateUI(weatherData);
      },
      child: Icon(
       Icons.near_me,
       size: 40.0,
       color: Colors.black
      ),
     ),
     TextButton(
      onPressed: () async {
       var typedName = await Navigator.push(
        context,
        MaterialPageRoute(
         builder: (context) {
          return CityScreen();
         },
        ),
       );
```

```
      if (typedName != null) {
        var weatherData =
            await weather.getCityWeather(typedName);
        updateUI(weatherData);
      }
    },
    child: Icon(
      FontAwesomeIcons.mapMarkedAlt,
      size: 40.0,
      color: Colors.black,
    ),
  ),
 ],
),

 SizedBox(height: MediaQuery.of(context).size.height*0.03,),

Center(
 child: Text(
       weatherIcon,
       style: kConditionTextStyle,
      ),
),


Padding(
 padding: EdgeInsets.only(left: 15.0),
 child: Row(
  mainAxisAlignment: MainAxisAlignment.center,
  children: <Widget>[
```

```
      Text(
        '$temperature',
        style: kTempTextStyle,
      ),

      Padding(
        padding: const EdgeInsets.only(left:15.0),
        child: Text("°", style:TextStyle(fontSize: 80, textBaseline: TextBaseline.alphabetic),),
      ),

      Padding(
        padding: const EdgeInsets.only(bottom:60.0 , left: 5),
        child: Text("C", style:TextStyle(fontSize: 60, textBaseline: TextBaseline.alphabetic),),
      ),


    ],
  ),
),


Row( mainAxisAlignment: MainAxisAlignment.center,
  children: [
    Center(
      child: Text(
          '$cityName , ',
          textAlign: TextAlign.right,
```

```
        style: TextStyle(fontSize: 25, color: Colors.white),
      ),
    ),


    Center(
  child: Text(
      '$country',
      textAlign: TextAlign.right,
      style: TextStyle(fontSize: 25, color: Colors.white),
    ),
),
  ],
),


SizedBox(height: 5,),

 Center(
  child: Text(
      '$weatherDescription'.toUpperCase(),
      textAlign: TextAlign.right,
      style: TextStyle(fontSize: 25, color: Colors.white, fontFamily: "Spartan MB"),
    ),
),



Padding(
  padding: EdgeInsets.only(right: 15.0,top: 140),
```

```
            child: Center(child:
            Text(DateFormat("dd-MM-yyyy").format(DateTime.now()),style: TextStyle(color: Colors.grey
,letterSpacing: 3,fontSize: 20),)
            ),

          ),

          // Text("$now"),


         ],
        ),
       ),
     ),
   );
 }
}.
```

Location.dart

```
import 'package:geolocator/geolocator.dart';

class Location {
  double latitude;
  double longitude;

  Future<void> getCurrentLocation() async {
    try {
      Position position = await Geolocator().getCurrentPosition(desiredAccuracy: LocationAccuracy.low);
```

```
//  LocationPermission permission = await Geolocator.requestPermission();

  // print(position);
  // print(permission);
  // LocationPermission pmission = await Geolocator.checkPermission();

  // await Geolocator.openAppSettings();
  // await Geolocator.openLocationSettings();

      latitude = position.latitude;
      longitude = position.longitude;

    } catch (e) {
      print(e);
    }
  }
}.
```

Networking.dart

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

class NetworkHelper {
  NetworkHelper(this.url);

  final String url;
```

```
 Future getData() async {
   http.Response response = await http.get(url);

   // print(response.body);
   // print(response.statusCode);

   if (response.statusCode == 200) {
     String data = response.body;
     print(data);

     return jsonDecode(data);
   } else {
     print(response.statusCode);
   }
 }
}
```

Weather.dart

```
import 'package:clima/services/location.dart';
import 'package:clima/services/networking.dart';

const apiKey = 'e5a3df01f4ffe9eb9f1c52b9933af374';
const openWeatherMapURL = 'https://api.openweathermap.org/data/2.5/weather';

class WeatherModel {
  Future<dynamic> getCityWeather(String cityName) async {
```

```
  NetworkHelper networkHelper =
NetworkHelper('$openWeatherMapURL?q=$cityName&appid=$apiKey&units=metric');

  var weatherData = await networkHelper.getData();
  return weatherData;
 }

 Future<dynamic> getLocationWeather() async {
  Location location = Location();
  await location.getCurrentLocation();

   // latitude = location.latitude;
   // longitude = location.longitude;

   // print("***  Latitude :  ${latitude}");
   // print("*** Longitude : ${longitude}");

  NetworkHelper networkHelper =
NetworkHelper('$openWeatherMapURL?lat=${location.latitude}&lon=${location.longitude}&appid=$apiKey&unit
s=metric');

  var weatherData = await networkHelper.getData();
  return weatherData;
 }

 String getWeatherIcon(int condition) {
  if (condition == 801) {
   return '';
  } else if (condition == 802) {
   return '';
  } else if (condition < 600) {
```

```
    return '⛈';
  } else if (condition == 803) {
    return '☃';
  } else if (condition < 800) {
    return '';
  } else if (condition == 800) {
    return '☀';
  } else if (condition == 804) {
    return '☁';
  } else {
    return '';
  }
}

String getMessage(int condition) {

  if (condition == 801) {
    return 'images/1.jpg';
  } else if (condition == 802) {
    return 'images/5.jpg';
  } else if (condition < 600) {      // rain
    return 'images/7.jpg';
  } else if (condition == 803) {
    return 'images/3.jpg';
  } else if (condition < 800) {
    return 'images/6.jpg';          // haze
  } else if (condition == 800) {
    return 'images/2.jpg';
  } else if (condition == 804) {
    return 'images/4.jpg';
```

```
    } else {
      return 'images/8.jpg';
    }
  }
}
```

```
    // if (temp > 25) {
    //   return 'It\'s 🍦 time';
    // } else if (temp > 20) {
    //   return 'Time for shorts and 👕';
    // } else if (temp < 10) {
    //   return 'You\'ll need 🧣 and 🧤';
    // } else {
    //   return 'Bring a 🧥 just in case';
    // }
```

constants.dart

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

const kTempTextStyle = TextStyle(
  fontFamily: 'Spartan MB',
  fontSize: 80.0,
);

const kMessageTextStyle = TextStyle(
  fontFamily: 'Spartan MB',
  fontSize: 30.0,
```

```
);

const kButtonTextStyle = TextStyle(
  fontSize: 30.0,
  fontFamily: 'Spartan MB',
);

const kConditionTextStyle = TextStyle(
  fontSize: 90.0,
);

const kTextFieldInputDecoration = InputDecoration(
                        hintText: "Search Location",
                        filled: true,
                        icon: Icon(Icons.search,size: 28,),
                        );


// InputDecoration(
//   filled: true,
//   fillColor: Colors.white,
//   icon: Icon(
//     Icons.location_city,
//     color: Colors.white,
//   ),
//   hintText: 'Enter City Name',
//   hintStyle: TextStyle(
//     color: Colors.grey,
//   ),
//   border: OutlineInputBorder(
```

```
//     borderRadius: BorderRadius.all(
//       Radius.circular(10.0),
//     ),
//     borderSide: BorderSide.none,
//   ),
// );
```

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Output:

MUNZESTA SOLUTIONS

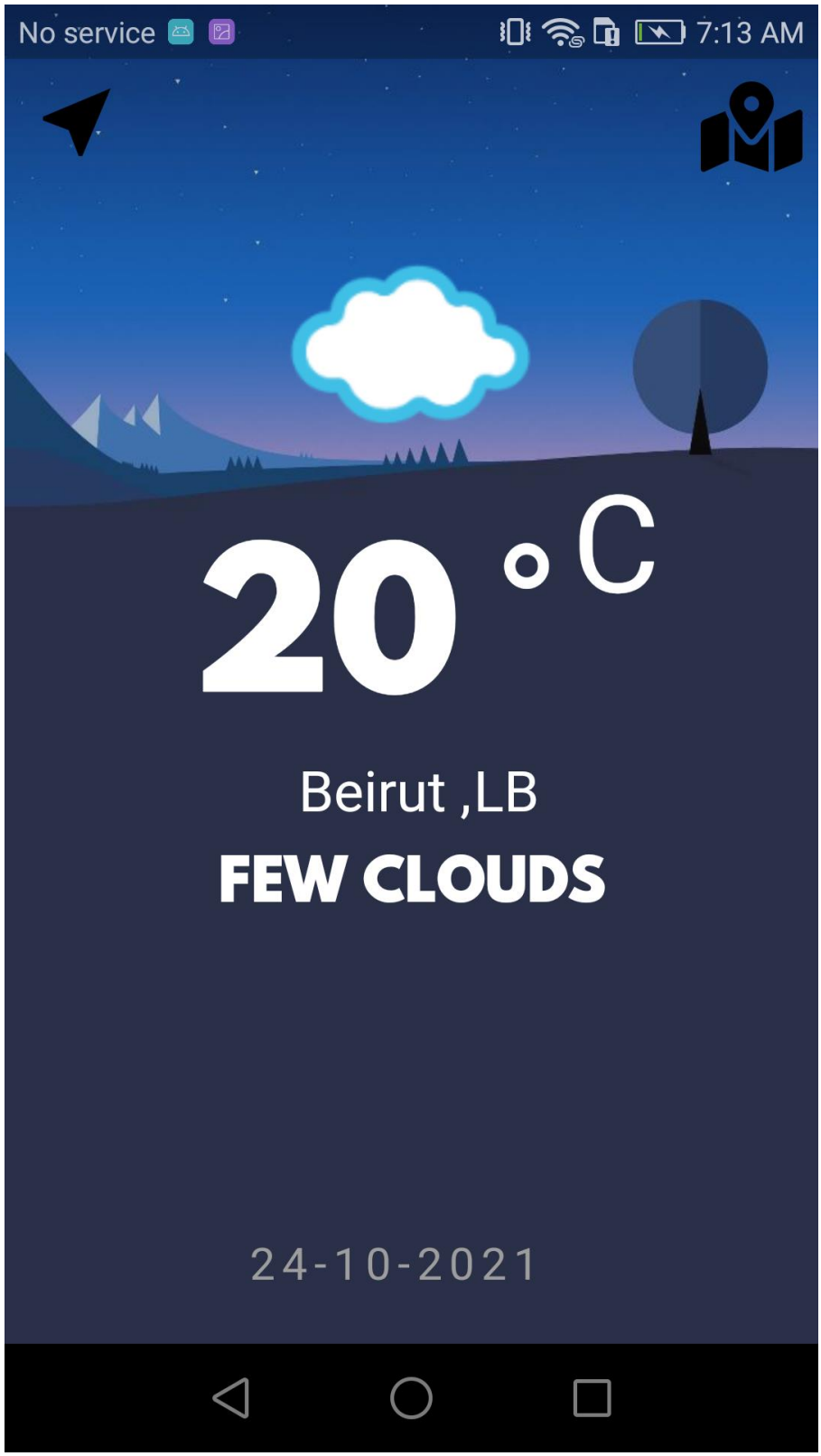
SHAHAB ALAM

MUNZESTA SOLUTIONS

SHAHAB ALAM

MUNZESTA SOLUTIONS

SHAHAB ALAM



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