

## Reading and Writing in JSON file

### main.dart

```
import 'dart:async';
import 'dart:io';
import 'dart:convert';
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
import './Player.dart';

List<Player> players = [];
List<Player> readplayers = [];
final File file = File('/home/faculty/Desktop/file1.json');

Future<void> readPlayerData (File file) async {
  //players = [];

  String contents = await file.readAsString();
  var jsonResponse = jsonDecode(contents);
  //print(jsonResponse);
  for(var p in jsonResponse){
    Player player = Player(p['name'],p['age'],p['hobby']);
    players.add(player);
  }
}

class TextFieldWidget extends StatefulWidget {
  @override
  State<TextFieldWidget> createState() => TextFieldWidgetState();
}

class TextFieldWidgetState extends State<TextFieldWidget> {
  TextEditingController namectrl = new TextEditingController();
  TextEditingController agectrl = new TextEditingController();
  TextEditingController hobbyctrl = new TextEditingController();
  String Pname = "";
  String Page = "";
  String Phobby= "";
  String displaydata = "";
  @override
  Widget build(BuildContext context) {
    // TODO: implement build
    return Scaffold(
      appBar: AppBar(
        title: Text("JSON File example"),
        centerTitle: true,
        backgroundColor: Colors.red,
      ),
      body: Column(
        children: <Widget>[
```

```

TextField(
  controller: namectrl,
  decoration: InputDecoration(
    labelText: "Name", hintText: "Enter your name"),
),

TextField(
  controller: agectrl,
  decoration: InputDecoration(
    labelText: "Age",
    hintText: "Enter your age",
  ),
),TextField(
  controller: hobbyctrl,
  decoration: InputDecoration(
    labelText: "Hobby",
    hintText: "Enter your Hobby",
  ),
),
TextButton(
  onPressed: () {

    setState(() {
      Pname = namectrl.text;
      Page = agectrl.text;
      Phobby = hobbyctrl.text;
      readPlayerData(file);

//add a new item to data list
      Player newPlayer = Player(
        Pname,
        Page,
        Phobby
      );

      players.add(newPlayer);
      players.map((player) => player.toJson(),).toList();
      file.writeAsStringSync(json.encode(players));
    });
  },
  child: Text("Save Data",
    style: TextStyle(
      fontSize: 20, backgroundColor: Colors.cyan)),
),TextButton(
  onPressed: () {
    displaydata="";

    setState(() {

      readPlayerData(file);

```

```

        players.forEach((element) {
            displaydata= displaydata+"Name:"+element.name+"\t";
            displaydata= displaydata+"Age:"+element.age+"\t";
            displaydata= displaydata+"Hobby:"+element.hobby+"\t";
            displaydata = displaydata+"\n";
        });
        // print(readplayers);
        print(displaydata);

        });
        //readplayers.clear();

        },
        child: Text("Display Data",
            style: TextStyle(
                fontSize: 20, backgroundColor: Colors.cyan)),
    ),
    Padding(
        padding: EdgeInsets.all(15),
        child: Text(displaydata),
    ),

    ],
));

}

}

void main() {
    runApp(MaterialApp(home: TextFieldWidget()));
}

```

### **Player.dart**

```

class Player {
    late String name;
    late String age;
    late String hobby;
    Player(
        this.name,
        this.age,
        this.hobby,
    );
    Map<String, dynamic> toJson() {
        final Map<String, dynamic> data = new Map<String, dynamic>();
        data['name'] = this.name;
        data['age'] = this.age;
        data['hobby'] = this.hobby;
    }
}

```

```
    return data;  
}  
  
}
```