

PRAKTIKUM #7

Latihan Shared Preferences

1. Buat Project baru : flutter_shared_preferences
2. Tambahkan dependency di pubspec.yaml

```
dependencies:  
  flutter:  
    sdk: flutter  
  shared_preferences: ^2.2.2
```

Kemudian jalankan perintah **flutter pub get** untuk mendapatkan package code **shared_preferences**

3. Code main.dart

```
import 'package:flutter/material.dart';  
import 'package:shared_preferences/shared_preferences.dart';  
  
void main() => runApp(const MyApp());  
  
class MyApp extends StatelessWidget {  
  const MyApp({Key? key}) : super(key: key);  
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      title: 'Shared Preferences',  
      theme: ThemeData(  
        primarySwatch: Colors.blue,  
      ),  
      home: const MyHomePage(),  
    );  
  }  
}  
  
class MyHomePage extends StatefulWidget {  
  const MyHomePage({Key? key}) : super(key: key);  
  @override  
  State<MyHomePage> createState() => _MyHomePageState();  
}  
  
class _MyHomePageState extends State<MyHomePage> {  
  String? email = "";  
  String? password = "";  
  
  TextEditingController emailController = TextEditingController();  
  TextEditingController passwordController = TextEditingController();
```

```

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(title: const Text('Flutter Shared Preferences')),
    body: ListView(
      padding: const EdgeInsets.all(8.0),
      children: [
        // input email
        TextField(
          controller: emailController,
          decoration: InputDecoration(
            labelText: "Email",
            border: OutlineInputBorder(
              borderRadius: BorderRadius.circular(5.0))),
        const Padding(padding: EdgeInsets.only(top: 4)),
        // input password
        TextField(
          controller: passwordController,
          decoration: InputDecoration(
            labelText: "Password",
            border: OutlineInputBorder(
              borderRadius: BorderRadius.circular(5.0))),
        // button untuk menyimpan email dan password ke dalam Shared
        // Preferences melalui method
        // setIntoSharedPreferences()
        ElevatedButton(
          child: const Text("Set"),
          onPressed: () {
            setIntoSharedPreferences();
          },
        ),
        const Padding(padding: EdgeInsets.only(top: 8)),
        // Menampilkan Email pada Text Widget
        Text(
          "Your Email : $email",
          style: const TextStyle(fontSize: 20),
        ),
        // Menampilkan password pada Text Widget

```

```

        Text(
            "Your Password : $password",
            style: const TextStyle(fontSize: 20),
        ),

        // Button yang berfungsi memanggil method getFromSharedPreferences()
        // untuk menampilkan
        // Email dan Password pada Text Widget
        ElevatedButton(
            child: const Text("Get"),
            onPressed: () {
                getFromSharedPreferences();
            },
        ),
    ],
),
);
}

// method ini berfungsi untuk memasukkan data ke dalam SharedPreferences
void setIntoSharedPreferences() async {
    SharedPreferences prefs = await SharedPreferences.getInstance();

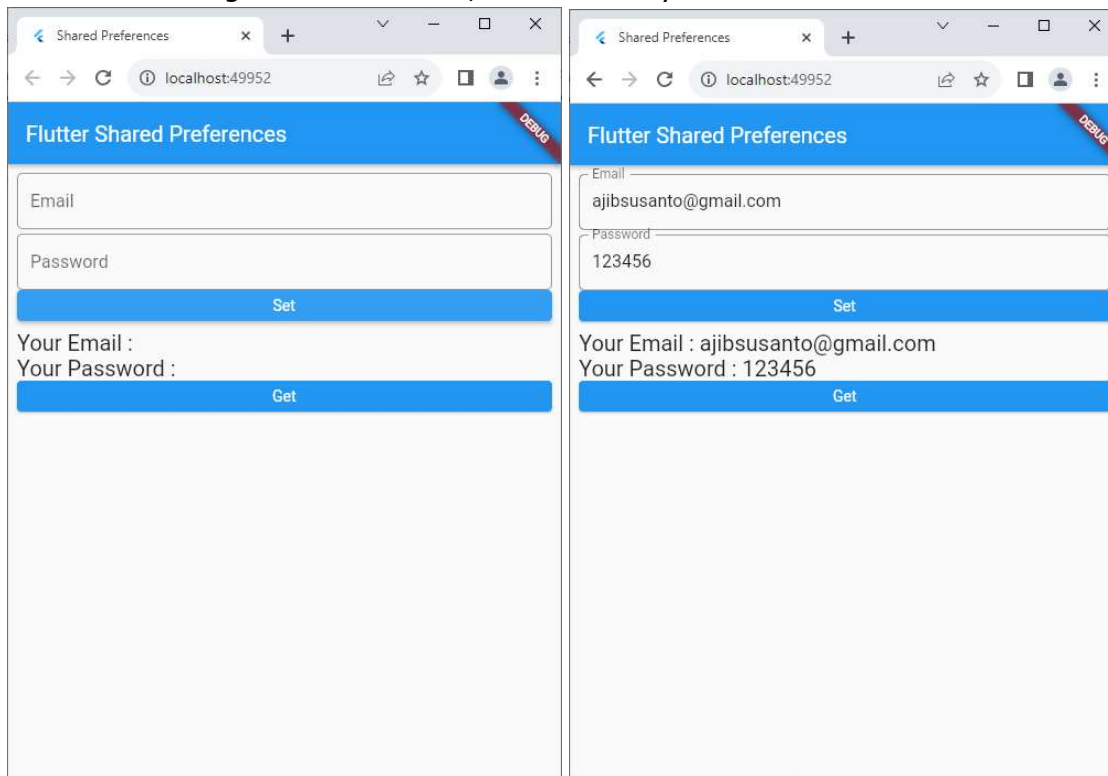
    await prefs.setString("email", emailController.text);
    await prefs.setString("password", passwordController.text);
}

// Method ini berfungsi untuk mengambil data Email dan Password dari
// SharedPreferences
// kemudian dimasukkan ke variable email dan password
void getFromSharedPreferences() async {
    SharedPreferences prefs = await SharedPreferences.getInstance();

    setState(() {
        email = prefs.getString("email");
        password = prefs.getString("password");
    });
}
}

```

4. Jalankan dengan device chrome, berikut hasilnya :



Isi email dan password, klik **Set**, kemudian klik **Get** untuk mengambil data yang ke simpan.

Latihan Splash screen & Dashboard

1. Buat Project baru : estehajib
2. Buat folder assets dan tambahkan assets di pubspec.yaml

```
flutter:  
  uses-material-design: true  
  assets:  
    - assets/
```

3. Class main.dart

```
import 'package:flutter/material.dart';  
import 'package:estehajib/splash_screen.dart';  
  
void main() {  
  runApp(const MyApp());  
}  
  
class MyApp extends StatelessWidget {  
  const MyApp({Key? key}) : super(key: key);  
  // This widget is the root of your application.  
  @override
```

```

Widget build(BuildContext context) {
  return MaterialApp(
    debugShowCheckedModeBanner: false,
    title: 'Aplikasi Es Teh Ajib',
    theme: ThemeData(
      primarySwatch: Colors.blue,
    ),
    home: const SplashScreen(),
  );
}
}
4.

```

5. Class splash_screen.dart

```

import 'dart:async';
import 'package:estehajib/blank_screen.dart';
import 'package:flutter/material.dart';

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

class _SplashScreenState extends State<SplashScreen> {
  startSplashScreen() async {
    var duration = const Duration(seconds: 5);
    return Timer(duration, () {
      Navigator.pushReplacement(
        context,
        MaterialPageRoute(builder: (context) => const Blankscreen()));
    });
  }
  @override
  void initState() {
    super.initState();
    startSplashScreen();
  }
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.blueGrey,
      body: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        crossAxisAlignment: CrossAxisAlignment.center,

```

```

        children: [
          Center(
            child: Image.asset(
              "Estehajib-Jumbo.jpg",
              width: 200.0,
              height: 100.0,
              fit: BoxFit.contain,
            ),
          ),
          const SizedBox(
            height: 24.0,
          ),
          const Text(
            "Es Teh Ajib",
            style: TextStyle(
              color: Colors.white,
              fontWeight: FontWeight.bold,
              fontSize: 35.0,
            ),
          ),
        ],
      ),
    );
  }
}

```

6. Class blank_screen.dart

```

import 'package:flutter/material.dart';

class Blankscreen extends StatelessWidget {
  const Blankscreen({Key? key}) : super(key: key);
  @override
  Widget build(BuildContext context) {
    return const Scaffold(
      backgroundColor: Color(0xff65005C),
      body: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        crossAxisAlignment: CrossAxisAlignment.center,
        children: [
          Center(
            child: SizedBox(
              height: 24.0,
            ),
          ),
          Text(

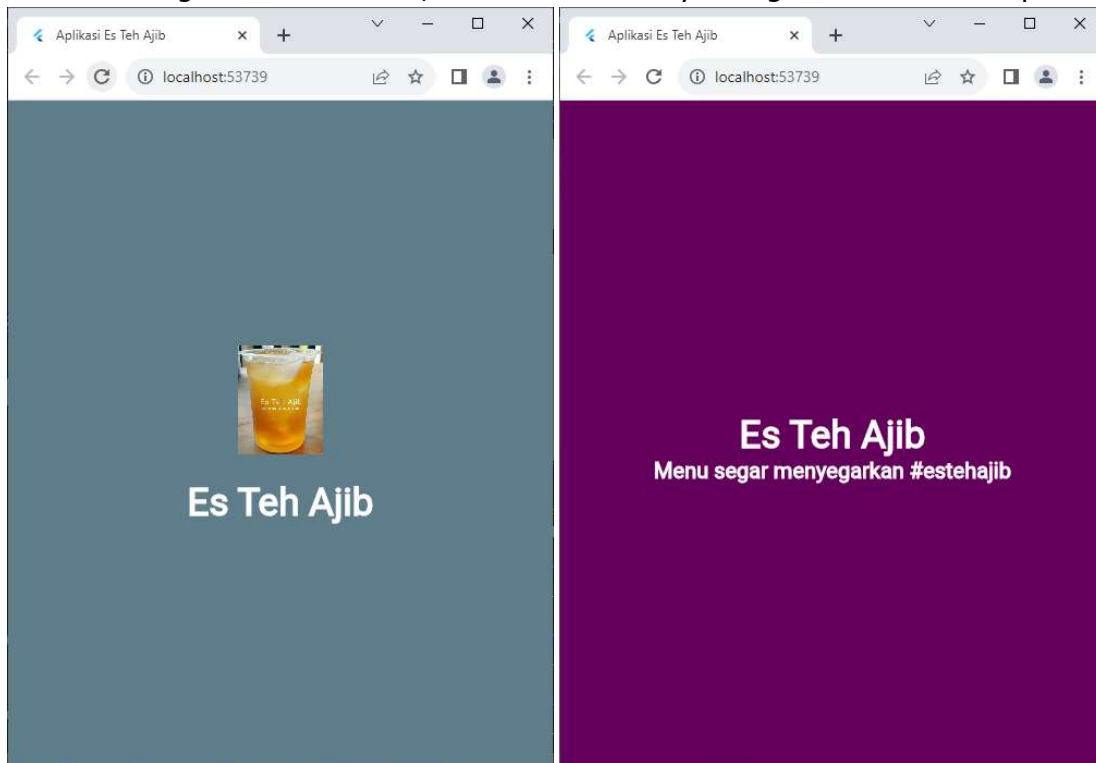
```

```

        "Es Teh Aji",
        textAlign: TextAlign.center,
        style: TextStyle(
            color: Colors.white,
            fontWeight: FontWeight.bold,
            fontSize: 35.0,
        ),
    ),
    Text(
        "Menu segar menyegarkan #estehajib",
        textAlign: TextAlign.center,
        style: TextStyle(
            color: Colors.white,
            fontWeight: FontWeight.bold,
            fontSize: 20.0,
        ),
    ),
],
),
);
}
}

```

7. Jalankan dengan device chrome, di bawah ini hasilnya dengan durasi 5 detik splash screen:



Latihan JSON

1. Buat Project baru : estehajib
2. Buat folder assets dan tambahkan assets di pubspec.yml

```
flutter:  
  uses-material-design: true  
  assets:  
    - assets/
```

3. Buat file book.json di folder assets

```
[  
  {  
    "judul": "Matematika",  
    "halaman": 200,  
    "best_seller": false  
  },  
  {  
    "judul": "IPA",  
    "halaman": 100,  
    "best_seller": true  
  },  
  {  
    "judul": "Sejarah",  
    "halaman": 300,  
    "best_seller": false  
  },  
  {  
    "judul": "Pemrograman Jaringan",  
    "halaman": 170,  
    "best_seller": true  
  }  
]
```

4. Buat class BookModel dengan nama book_model.dart

```
class BookModel {  
  final String judul;  
  final int halaman;  
  final bool isBestSeller;  
  BookModel(  
    {required this.judul, required this.halaman, required this.isBestSeller});  
  
  factory BookModel.fromJSON(Map<String, dynamic> json) => BookModel(  
    judul: json['judul'],  
    halaman: json['halaman'],  
    isBestSeller: json['best_seller'],  
  );  
}
```


5. Buat class BookService dengan nama book_services.dart

```
import 'dart:convert';

//untuk mengakses file assets
import 'package:flutter/services.dart';
import 'book_model.dart';

class BookServices {
  static Future<List<BookModel>> getBooksFromJSON() async {
    try {
      final result =
        jsonDecode(await rootBundle.loadString('assets/book.json')) as List;

      return result.map((book) => BookModel.fromJSON(book)).toList();
    } catch (e) {
      throw Exception(e);
    }
  }
}
```

6. Code class main.dart

```
import 'package:flutter/material.dart';
import 'package:flutter_json/book_model.dart';
import 'package:flutter_json/book_services.dart';

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({Key? key}) : super(key: key);
  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        // This is the theme of your application.
        //
        // Try running your application with "flutter run". You'll see the
        // application has a blue toolbar. Then, without quitting the app, try
        // changing the primarySwatch below to Colors.green and then invoke
        // "hot reload" (press "r" in the console where you ran "flutter run",
        // or simply save your changes to "hot reload" in a Flutter IDE).
```

```

        // Notice that the counter didn't reset back to zero; the application
        // is not restarted.
        primarySwatch: Colors.blue,
      ),
      home: const BookPage(),
    );
  }
}

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

class _BookPageState extends State<BookPage> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Halaman Buku'),
      ),
      body: FutureBuilder<List<BookModel>>(
        future: BookServices.getBooksFromJSON(),
        builder: (context, snapshot) {
          if (snapshot.connectionState == ConnectionState.done) {
            return ListView.builder(
              itemCount: snapshot.data!.length,
              itemBuilder: (context, index) {
                final book = snapshot.data![index];
                return ListTile(
                  title: Text(book.judul),
                  subtitle: Text(
                    'Jumlah halaman : ${book.halaman}',
                  ),
                  trailing: book.isBestSeller
                    ? Chip(
                        label: Text(
                          'Best Seller',
                          style: Theme.of(context)
                            .textTheme
                            .button!
                            .copyWith(
                              color: Colors.white,

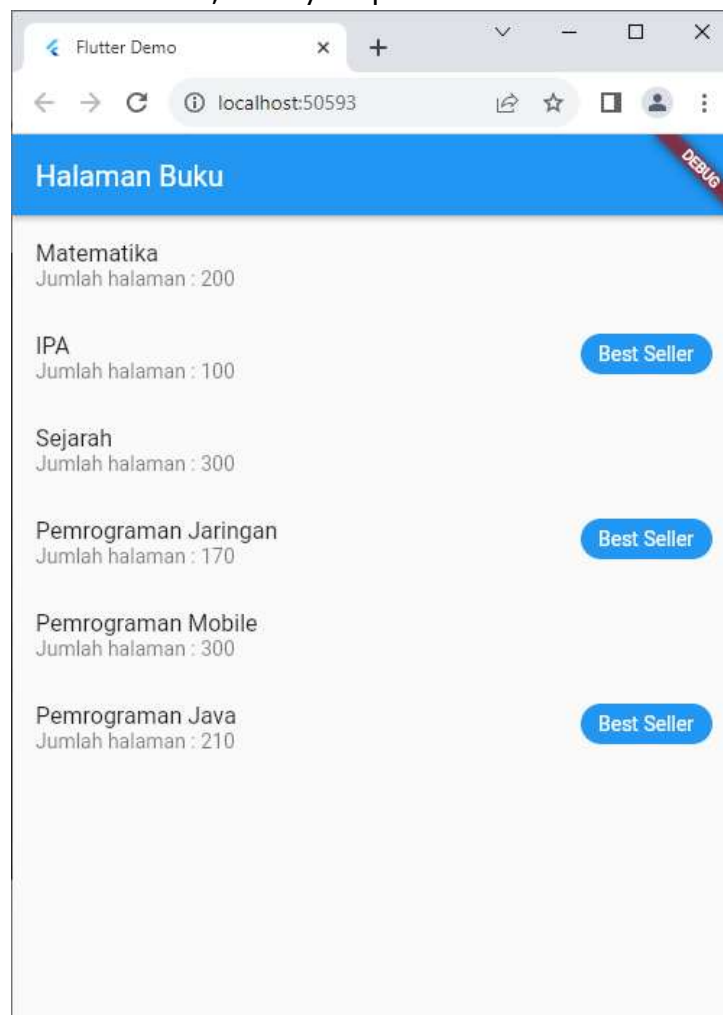
```

```

        ),
        ),
        backgroundColor: Colors.blue)
        : const SizedBox.shrink(),
    );
  });
} else {
  return const Center(
    child: CircularProgressIndicator(),
  );
}
}),
);
}
}

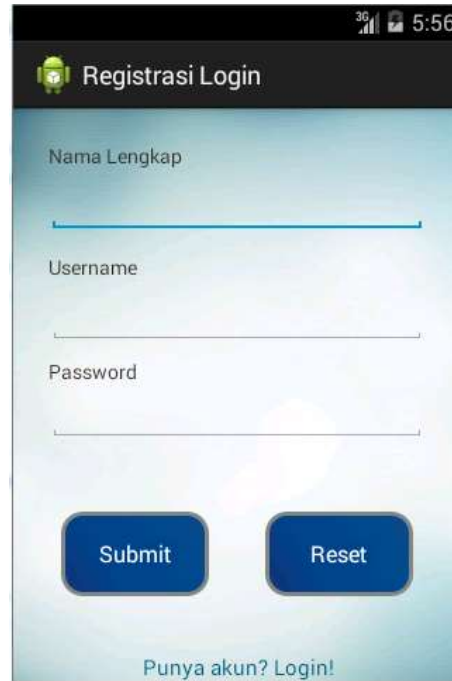
```

7. Jalankan dengan device chrome, hasilnya seperti berikut :



Tugas 1 :

Buat Aplikasi Login yang nantinya user dan password akan disimpan di shared preferences, jika user password belum ada maka dapat membuat/create user, jika sudah maka user langsung dapat melakukan Login !



The screenshot shows a mobile application interface for registration and login. The title bar at the top is black with a green Android icon and the text 'Registrasi Login'. The status bar above it shows '3G', signal strength, and the time '5:56'. The main content area has a light blue background with a faint watermark of a person. It contains three text input fields labeled 'Nama Lengkap', 'Username', and 'Password'. Below these fields are two blue buttons with white text: 'Submit' and 'Reset'. At the bottom of the screen, there is a link that says 'Punya akun? Login!'.

Tugas 2 :

Buat Aplikasi E-Commerce dengan halaman sebagai berikut :

- Splash Screen
- Login yang nantinya user dan password akan disimpan di shared preferences, jika user password belum ada maka dapat membuat/create user, jika sudah maka user langsung dapat melakukan Login !
- Dashboard menampilkan produk
- Detail Produk ditampilkan jika gambar produk di dashboard diklik.