

MPL EXPERIMENT 4

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CLASS-D15A

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AIM: To create an interactive Form using form widget.

Theory:

1. Introduction

Forms are a crucial component in mobile applications for collecting user input. Flutter provides the **Form** widget, which helps manage multiple input fields efficiently and allows validation before submission.

The **Form** widget works in combination with **TextFormField** and a **GlobalKey<FormState>** to track the form state, validate inputs, and process the collected data.

2. Form Widget Overview

The **Form** widget in Flutter acts as a container for form fields and manages their state. It provides built-in validation and submission handling.

Key Components of a Form:

1. Form Widget:

- Wraps multiple input fields (TextFormFields) together.
- Requires a *GlobalKey<FormState>* to track and validate form fields.

2. TextFormField Widget:

- A special type of text field used in forms.
- Supports validation and user input.

3. Validator Function:

- Ensures correct user input and prevents invalid data.
- Example: Ensuring an email field contains a valid email format.

4. Submit Button:

- Triggers form validation and submission.

3. Working Principle of Form widget

The **Form** widget allows developers to:

- Group multiple **TextFormField** widgets together.
- Validate input before proceeding.
- Save user input after validation.

The **GlobalKey<FormState>** is used to control the form, providing methods like:

- *formKey.currentState!.validate()* → Checks all validators in the form fields.
- *formKey.currentState!.save()* → Saves the form input values.
- *formKey.currentState!.reset()* → Clears the form fields.

CODE:

Register_signup page

```
import 'package:flutter/material.dart';
import
'package:spotify_clone/features/auth/sc
reens/sign_in_screen.dart';
import
'package:spotify_clone/features/auth/sc
reens/register.dart';
```

```
class RegisterScreen extends
StatelessWidget {
  const RegisterScreen( {Key? key} ) :
super(key: key);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: const
Color(0xFF1C1B1B),
```

```
body: SafeArea(
  child: Column(
    children: [
      Padding(
        padding: const
EdgeInsets.all(16.0),
        child: Row(
          children: [
            IconButton(
              icon: const
Icon(Icons.arrow_back, color:
Colors.white),
              onPressed: () =>
Navigator.pop(context),
            ),
          ],
        ),
      ),
      Expanded(
```

```

        child: SingleChildScrollView(
          child: Padding(
            padding: const
EdgeInsets.symmetric(horizontal:
24.0),
            child: Column(
              crossAxisAlignment:
CrossAxisAlignment.center,
              children: [
                Image.asset(
'assets/images/spotify_logo.png',
                  width: //235
                    500,
                  height: 150,
                ),
                const SizedBox(height:
32),
                const Text(
                  'Enjoy Listening To
Music',
                  style: TextStyle(
                    color: Colors.white,
                    fontSize: 24,
                    fontWeight:
FontWeight.bold,
                  ),
                ),
                const SizedBox(height:
16),
                const Text(
                  'Spotify is a proprietary
Swedish audio\nstreaming and media
services provider',
                  textAlign:
TextAlign.center,
                  style: TextStyle(
                    color: Colors.grey,
                    fontSize: 16,

```

```

                ),
              ),
            const SizedBox(height:
32),
            SizedBox(
              width: double.infinity,
              height: 56,
              child: ElevatedButton(
                onPressed: () {
                  Navigator.push(
                    context,
                    MaterialPageRoute(
                      builder: (context)
=>
                        Register()), //
                    Navigate to ThirdScreen
                  );
                  // Handle register
                },
                style:
ElevatedButton.styleFrom(
                  backgroundColor:
const Color(0xFF42C83C),
                  shape:
RoundedRectangleBorder(
                    borderRadius:
BorderRadius.circular(30),
                  ),
                ),
                child: const Text(
                  'Register',
                  style: TextStyle(
                    color: Colors.white,
                    fontSize: 16,
                    fontWeight:
FontWeight.bold,

```



```

Icon(Icons.arrow_back, color: Colors.white),
    onPressed: () =>
Navigator.pop(context),
    ),
    const SizedBox(width: 10),
    Image.asset(
'assets/images/spotify_logo.png',
    height: 150,
    ),
  ],
),
const SizedBox(height: 32),
const Text(
  'Register',
  style: TextStyle(
    color: Colors.white,
    fontSize: 28,
    fontWeight:
FontWeight.bold,
  ),
),
const SizedBox(height: 8),
Row(
  children: [
    const Text(
      'If You Need Any Support
',
      style: TextStyle(color:
Colors.grey),
    ),
    TextButton(
      onPressed: () {},
      child: const Text(
        'Click Here',
        style: TextStyle(color:
Colors.green),
        borderRadius:
),
    ),
  ],
),
const SizedBox(height: 32),
TextField(
  style: const TextStyle(color:
Colors.white),
  decoration:
InputDecoration(
    hintText: 'Full Name',
    hintStyle: const
TextStyle(color: Colors.grey),
    filled: true,
    fillColor:
Colors.grey.withOpacity(0.1),
    border:
OutlineInputBorder(
      borderRadius:
BorderRadius.circular(12),
      borderSide:
BorderSide.none,
    ),
  ),
),
const SizedBox(height: 16),
TextField(
  style: const TextStyle(color:
Colors.white),
  decoration:
InputDecoration(
    hintText: 'Enter Email',
    hintStyle: const
TextStyle(color: Colors.grey),
    filled: true,
    fillColor:
Colors.grey.withOpacity(0.1),
    border:
OutlineInputBorder(

```

```

BorderRadius.circular(12),
    borderSide:
BorderSide.none,
    ),
    ),
    ),
const SizedBox(height: 16),
TextField(
  obscureText:
  _obscurePassword,
  style: const TextStyle(color:
Colors.white),
  decoration:
InputDecoration(
  hintText: 'Password',
  hintStyle: const
TextStyle(color: Colors.grey),
  filled: true,
  fillColor:
Colors.grey.withOpacity(0.1),
  border:
OutlineInputBorder(
    borderRadius:
BorderRadius.circular(12),
    borderSide:
BorderSide.none,
  ),
  suffixIcon: IconButton(
    icon: Icon(
      _obscurePassword
      ? Icons.visibility_off
      : Icons.visibility,
      color: Colors.grey,
    ),
    onPressed: () {
      setState(() {
        _obscurePassword =
!_obscurePassword;
      });
    },
  ),
),
const SizedBox(height: 32),
const MainScreen(),
);
},
style:
ElevatedButton.styleFrom(
  backgroundColor: const
Color(0xFF42C83C),
  shape:
RoundedRectangleBorder(
  borderRadius:
BorderRadius.circular(30),
),
),
child: const Text(
  'Create Account',
  style: TextStyle(
    fontSize: 16,
    fontWeight:
FontWeight.bold,
  ),
),
const SizedBox(height: 32),
});

```

```

        mainAxisAlignment:
MainAxisAlignment.center,
        children: [
            Image.asset('assets/images/google_logo.png', height: 40),
            const SizedBox(width: 20),
            Image.asset('assets/images/apple_logo.png', height: 40),
        ],
    ),
    const SizedBox(height: 32),
    Row(
        mainAxisAlignment:
MainAxisAlignment.center,
        children: [
            const Text(
                'Do You Have An
Account? ',
                style: TextStyle(color:
Colors.grey),
            ),
            TextButton(
                onPressed: () {
                    Navigator.push(
                        context,
                        MaterialPageRoute(
                            builder: (context) =>
const SignInScreen()),
                );
            },
            child: const Text(
                'Sign In',
                style: TextStyle(color:
Colors.white),
            ),

```

Sign_in_screen.dart

```

import 'package:flutter/material.dart';
import
'package:spotify_clone/main.dart';

import 'register.dart';

class SignInScreen extends
StatefulWidget {
  const SignInScreen({Key? key}) :
super(key: key);

  @override
  State<SignInScreen> createState() =>
_SignInScreenState();
}

class _SignInScreenState extends
State<SignInScreen> {
  bool _obscurePassword = true;

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: const
Color(0xFF1C1B1B),
      body: SafeArea(
        child: SingleChildScrollView(
          child: Padding(
            padding: const
EdgeInsets.all(24.0),
            child: Column(
              crossAxisAlignment:
CrossAxisAlignment.start,
              children: [
                Row(
                  children: [
                    IconButton(
                      Colors.green),

```

```

icon: const Icon(Icons.arrow_back,
color: Colors.white),
                onPressed: () =>
Navigator.pop(context),
              ),
              const SizedBox(width: 12),
              Image.asset(
                'assets/images/spotify_logo.png',
                height: 150,
              ),
            ],
          ),
            const SizedBox(height: 32),
            const Text(
              'Sign In',
              style: TextStyle(
                color: Colors.white,
                fontSize: 28,
                fontWeight:
FontWeight.bold,
              ),
            ),
            const SizedBox(height: 8),
            Row(
              children: [
                const Text(
                  'If You Need Any Support
                ',
                style: TextStyle(color:
Colors.grey),
              ),
                TextButton(
                  onPressed: () {},
                  child: const Text(
                    'Click Here',
                    style: TextStyle(color:
fillColor: Colors.grey.withOpacity(0.1),

```



```

    ),
  ],
),
const SizedBox(height: 32),
TextField(
  style: const TextStyle(color:
Colors.white),
  decoration:
InputDecoration(
  hintText: 'Enter Username
Or Email',
  hintStyle: const
TextStyle(color: Colors.grey),
  filled: true,
  fillColor:
Colors.grey.withOpacity(0.1),
  border:
OutlineInputBorder(
    borderRadius:
BorderRadius.circular(12),
    borderSide:
BorderSide.none,
  ),
),
),
const SizedBox(height: 16),
TextField(
  obscureText:
_obscurePassword,
  style: const TextStyle(color:
Colors.white),
  decoration:
InputDecoration(
    hintText: 'Password',
    hintStyle: const
TextStyle(color: Colors.grey),
    filled: true,
    SizedBox(
width: double.infinity,

```

```

border:
OutlineInputBorder(
  borderRadius:
BorderRadius.circular(12),
  borderSide:
BorderSide.none,
),
suffixIcon: IconButton(
  icon: Icon(
    _obscurePassword
? Icons.visibility_off
: Icons.visibility,
    color: Colors.grey,
  ),
  onPressed: () {
    setState(() {
      _obscurePassword =
!_obscurePassword;
    });
  },
),
),
const SizedBox(height: 16),
Align(
  alignment:
Alignment.centerRight,
  child: TextButton(
    onPressed: () {},
    child: const Text(
      'Recovery Password',
      style: TextStyle(color:
Colors.grey),
    ),
  ),
),
const SizedBox(height: 32),

```

```

height: 56,
child: ElevatedButton(
  onPressed: () {
    Navigator.push(
      context,
      MaterialPageRoute(
        builder: (context) =>
const MainScreen()),
    );
  },
  style:
ElevatedButton.styleFrom(
  backgroundColor: const
Color(0xFF42C83C),
  shape:
RoundedRectangleBorder(
  borderRadius:
BorderRadius.circular(30),
),
),
child: const Text(
  'Sign In',
  style: TextStyle(
    fontSize: 16,
    fontWeight:
FontWeight.bold,
),
),
),
const SizedBox(height: 16),
const Center(
  child: Text(
    'Or',
    style: TextStyle(color:
Colors.grey),
),
),
),
),

```

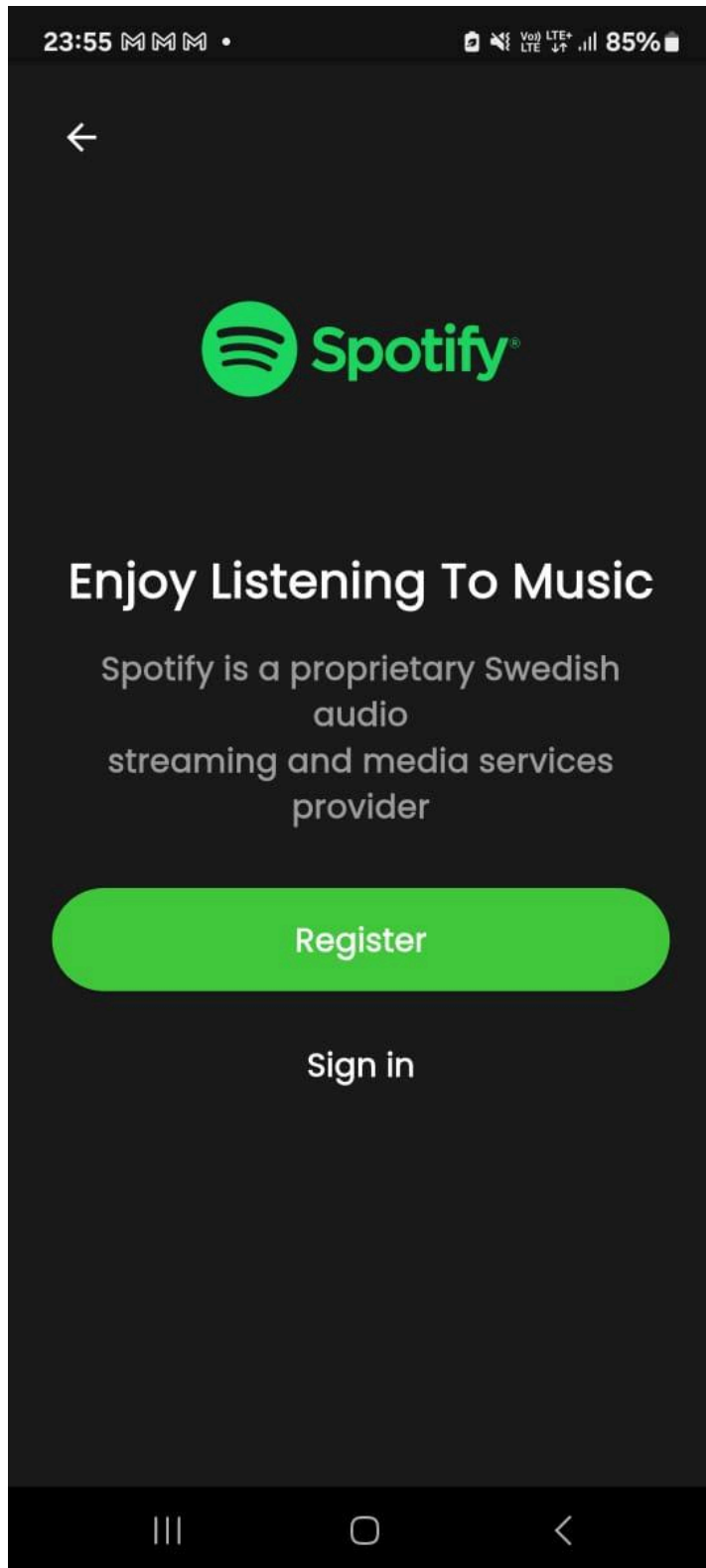
```

const SizedBox(height: 16),
Row(
  mainAxisAlignment:
MainAxisAlignment.center,
  children: [
Image.asset('assets/images/google_logo
.png', height: 40),
    const SizedBox(width: 20),
Image.asset('assets/images/apple_logo.
png', height: 40),
  ],
),
const SizedBox(height: 32),
Row(
  mainAxisAlignment:
MainAxisAlignment.center,
  children: [
    const Text(
      'Not A Member? ',
      style: TextStyle(color:
Colors.grey),
    ),
    TextButton(
      onPressed: () {
        Navigator.push(
          context,
          MaterialPageRoute(
            builder: (context) =>
const Register()),
        );
      },
      child: const Text(
        'Register Now',
        style: TextStyle(color:
Colors.blue),







```



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

OUTPUT (Register/Signup page)



Register page

23:55   •    85% 


 

Register



If You Need Any Support [Click Here](#)

Full Name




Enter Email

Password 

Create Account

Do You Have An Account? [Sign In](#)

Sign In Page



Sign In

If You Need Any Support [Click Here](#)



[Recovery Password](#)

Sign In

Or



Not A Member? [Register Now](#)

