

## MPL Experiment 4

**Name:** Sneha Patra

**Class:** D15A

**Roll no:**40

**Aim:** To create an interactive Form using form widgets.

### **Theory:**

Creating an interactive form in Flutter requires using form-related widgets to collect and validate user input efficiently. The Form widget, combined with TextFormField, provides a structured way to manage input fields. Input widgets like TextField, DropdownButton, Checkbox, Radio, and Switch allow users to enter data in different formats.

Validation and state management can be handled using the GlobalKey<FormState> to validate inputs before submission.

Wrapping the form in a SingleChildScrollView ensures smooth scrolling when multiple fields are present.

A RaisedButton or ElevatedButton can trigger validation and submission logic. For a responsive experience, proper padding, spacing, and InputDecoration enhance usability.

### **Code:**

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

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

  @override
  State<SignInPage> createState() => _SignInPageState();
}

class _SignInPageState extends State<SignInPage> {
  final _formKey = GlobalKey<FormState>();
  final TextEditingController _emailController = TextEditingController();
  final TextEditingController _passwordController = TextEditingController();

  String? _validateEmail(String? value) {
    if (value == null || value.isEmpty) {
      return 'Please enter your email';
    }
    const emailPattern = r'^[\w-\.]++@([\w-]+\.)+[\w-]{2,4}$';
    if (!RegExp(emailPattern).hasMatch(value)) {
      return 'Enter a valid email address';
    }
  }
}
```

```

        return null;
    }

String? _validatePassword(String? value) {
    if (value == null || value.isEmpty) {
        return 'Please enter your password';
    }
    if (value.length < 6) {
        return 'Password must be at least 6 characters';
    }
    return null;
}

void _onSubmit() {
    if (_formKey.currentState!.validate()) {
        // All fields are valid
        ScaffoldMessenger.of(context).showSnackBar(
            const SnackBar(content: Text('Signing in...')),
        );
        // Add your sign-in logic here
    }
}

@override
Widget build(BuildContext context) {
    return Scaffold(
        appBar: AppBar(
            backgroundColor: Colors.blue,
            title: const TextField(
                decoration: InputDecoration(
                    hintText: "Search JioMart",
                    hintStyle: TextStyle(color: Colors.white70),
                    prefixIcon: Icon(Icons.search, color: Colors.white),
                    border: InputBorder.none,
                ),
                style: TextStyle(color: Colors.white),
            ),
        actions: [
            IconButton(
                icon: const Icon(Icons.shopping_cart),
                onPressed: () {},
            ),
        ],
        body: Padding(
            padding: const EdgeInsets.all(16.0),

```



```

child: Form(
  key: _formKey,
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      const Text(
        "Sign in",
        style: TextStyle(fontSize: 32, fontWeight: FontWeight.bold),
      ),
      const SizedBox(height: 8),
      const Text(
        "Let's sign in to access your JioMart account",
        style: TextStyle(fontSize: 16, color: Colors.black54),
      ),
      const SizedBox(height: 16),
      TextFormField(
        controller: _emailController,
        decoration: const InputDecoration(
          labelText: "Email",
          border: UnderlineInputBorder(),
        ),
        keyboardType: TextInputType.emailAddress,
        validator: _validateEmail,
      ),
      const SizedBox(height: 16),
      TextFormField(
        controller: _passwordController,
        decoration: const InputDecoration(
          labelText: "Password",
          border: UnderlineInputBorder(),
        ),
        obscureText: true,
        validator: _validatePassword,
      ),
      const SizedBox(height: 24),
      SizedBox(
        width: double.infinity,
        height: 50,
        child: ElevatedButton(
          onPressed: _onSubmit,
          style: ElevatedButton.styleFrom(
            shape: RoundedRectangleBorder(
              borderRadius: BorderRadius.circular(10),
            ),
          ),
          child: const Text(
            "Continue",
            style: TextStyle(fontSize: 18, color: Colors.blue),
          ),
        ),
      ),
    ],
  ),
),

```

```
        ),
      ),
      const SizedBox(height: 16),
      const Text(
        "By continuing, you agree to our Terms and Conditions of Use, Privacy Policy and Retail Account Privacy Policy.",
        style: TextStyle(fontSize: 12, color: Colors.black54),
        textAlign: TextAlign.center,
      ),
    ),
    1,
  ),
),
),
);
}}
```

Output:

 Search JioMart

# Sign in

Let's sign in to access your JioMart account

Email

2022.sneha.patra@ves.ac.in

---





Password

.....

---

Continue

By continuing, you agree to our Terms and Conditions of Use, Privacy Policy and Retail Account Privacy Policy.

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Search JioMart



# Sign in

Let's sign in to access your JioMart account

Email

sneha

Enter a valid email address

Password

....

Password must be at least 6 characters

Continue

By continuing, you agree to our Terms and Conditions of Use, Privacy Policy and Retail Account Privacy Policy.



Home



Categories



Orders



Profile

