

## **EXPERIMENT NO: 04**

### **Aim:**

To create an interactive **Login** and **Sign-Up** form using the **Form widget** in Flutter.

### **Theory: Understanding Forms in Flutter**

A **Form** in Flutter is a structured widget used to collect user input through various fields like **TextFields**, **Dropdowns**, and **Buttons**. Forms are essential for user authentication, data entry, and submissions in applications.

### **Key Features of Forms in Flutter:**

1. **Validation** – Ensures user input meets required criteria before submission.
2. **State Management** – Manages user input efficiently.
3. **Error Handling** – Displays validation errors when needed.

### **Components of Login & Sign-Up Forms in Flutter:**

#### **1. Form Widget:**

- Acts as a container to group multiple **TextFormFields** and manage their validation.

#### **2. TextFormField for User Input:**

- Used for entering **mobile numbers, names, emails, and passwords**.

#### **3. Input Decoration:**

- **Custom styling**, including labels, icons, borders, and hint text.

#### **4. GlobalKey for Identification:**

- **GlobalKey<FormState>** helps manage validation and state.

#### **5. Form Validation:**

- Ensures correct format for phone numbers, emails, and passwords.

#### **6. Submit Button:**

- Triggers validation and submits data.

## Login Page :

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

class LoginPage extends StatelessWidget {
  final TextEditingController mobileController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      body: SafeArea(
        child: Column(
          children: [
            // Banner with Shopping Cart Image
            Container(
              width: double.infinity,
              height: 200,
              decoration: BoxDecoration(
                gradient: LinearGradient(
                  colors: [Colors.yellow.shade100, Colors.pink.shade100],
                  begin: Alignment.topLeft,
                  end: Alignment.bottomRight,
                ),
              ),
            ),
            child: Image.asset(
              'assets/images/shopping_cart.png',
              fit: BoxFit.cover,
            ),

            const SizedBox(height: 20),

            // Login or Signup Text
            Padding(
```

```
padding: const EdgeInsets.symmetric(horizontal: 16.0),
child: Row(
  children: [
    Text("Login ", style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold, color: Colors.black)),
    Text("or Signup", style: TextStyle(fontSize: 18, color: Colors.black54)),
  ],
),
),

const SizedBox(height: 20),

// Mobile Number Input Field
Padding(
  padding: const EdgeInsets.symmetric(horizontal: 16.0),
  child: TextField(
    controller: mobileController,
    keyboardType: TextInputType.phone,
    decoration: InputDecoration(
      hintText: "Mobile Number",
      border: OutlineInputBorder(borderRadius: BorderRadius.circular(8)),
      focusedBorder: OutlineInputBorder(
        borderRadius: BorderRadius.circular(8),
        borderSide: BorderSide(color: Colors.pink.shade300, width: 2),
      ),
    ),
  ),
),

const SizedBox(height: 20),

// Continue Button
Padding(
  padding: const EdgeInsets.symmetric(horizontal: 16.0),
  child: SizedBox(
    width: double.infinity,
```

```

        child: ElevatedButton(
          onPressed: () {
            Navigator.pushNamed(context, '/home');
          },
          style: ElevatedButton.styleFrom(
            backgroundColor: Colors.pink.shade300,
            padding: const EdgeInsets.symmetric(vertical: 16),
            shape: RoundedRectangleBorder(borderRadius: BorderRadius.circular(8)),
          ),
          child: Text("CONTINUE", style: TextStyle(fontSize: 16, color: Colors.white, fontWeight:
FontWeight.bold)),
        ),
      ),
    ),

    const SizedBox(height: 20),

    // Sign Up Link
    Row(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        Text("Don't have an account? ", style: TextStyle(color: Colors.black54)),
        GestureDetector(
          onTap: () {
            Navigator.pushNamed(context, '/signup');
          },
          child: Text("Sign up", style: TextStyle(color: Colors.pink.shade300, fontWeight:
FontWeight.bold)),
        ),
      ],
    ),
  ],
),
),
);
}

```

}

Android Emulator - flutter\_emulator:5554



10:50



**Login** or Signup

Mobile Number

**CONTINUE**

Don't have an account? [Sign up](#)

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## Sign-Up Page Implementation (SignUpPage.dart)

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

class SignUpPage extends StatelessWidget {
  final TextEditingController nameController = TextEditingController();
  final TextEditingController emailController = TextEditingController();
  final TextEditingController mobileController = TextEditingController();
  final TextEditingController passwordController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      body: SafeArea(
        child: Column(
          children: [
            // Banner Section
            Container(
              width: double.infinity,
              height: 200,
              decoration: BoxDecoration(
                gradient: LinearGradient(
                  colors: [Colors.yellow.shade100, Colors.pink.shade100],
                  begin: Alignment.topLeft,
                  end: Alignment.bottomRight,
                ),
              ),
            ),
            child: Image.asset(
              'assets/images/shopping_cart.png',
              fit: BoxFit.cover,
            ),
          ],
        ),
      ),
    );

    const SizedBox(height: 20),
```

```
// Create Account Text
```

```
Padding(  
  padding: const EdgeInsets.symmetric(horizontal: 16.0),  
  child: Row(  
    children: [  
      Text("Create ", style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold, color: Colors.black)),  
      Text("Account", style: TextStyle(fontSize: 18, color: Colors.black54)),  
    ],  
  ),  
),
```

```
const SizedBox(height: 20),
```

```
// Name Input
```

```
Padding(  
  padding: const EdgeInsets.symmetric(horizontal: 16.0),  
  child: TextField(  
    controller: nameController,  
    decoration: InputDecoration(  
      hintText: "Full Name",  
      border: OutlineInputBorder(borderRadius: BorderRadius.circular(8)),  
    ),  
  ),  
),
```

```
const SizedBox(height: 12),
```

```
// Email Input
```

```
Padding(  
  padding: const EdgeInsets.symmetric(horizontal: 16.0),  
  child: TextField(  
    controller: emailController,  
    keyboardType: TextInputType.emailAddress,  
    decoration: InputDecoration(  

```

```
        hintText: "Email Address",
        border: OutlineInputBorder(borderRadius: BorderRadius.circular(8)),
    ),
),
),

const SizedBox(height: 12),

// Mobile Number Input
Padding(
    padding: const EdgeInsets.symmetric(horizontal: 16.0),
    child: TextField(
        controller: mobileController,
        keyboardType: TextInputType.phone,
        decoration: InputDecoration(
            hintText: "Mobile Number",
            border: OutlineInputBorder(borderRadius: BorderRadius.circular(8)),
        ),
    ),
),

const SizedBox(height: 12),

// Password Input
Padding(
    padding: const EdgeInsets.symmetric(horizontal: 16.0),
    child: TextField(
        controller: passwordController,
        obscureText: true,
        decoration: InputDecoration(
            hintText: "Password",
            border: OutlineInputBorder(borderRadius: BorderRadius.circular(8)),
        ),
    ),
),
),
```



```
const SizedBox(height: 20),

// Sign Up Button
Padding(
  padding: const EdgeInsets.symmetric(horizontal: 16.0),
  child: SizedBox(
    width: double.infinity,
    child: ElevatedButton(
      onPressed: () {
        Navigator.pushNamed(context, '/home');
      },
      style: ElevatedButton.styleFrom(
        backgroundColor: Colors.pink.shade300,
        padding: const EdgeInsets.symmetric(vertical: 16),
      ),
      child: Text("SIGN UP", style: TextStyle(fontSize: 16, color: Colors.white, fontWeight:
FontWeight.bold)),
    ),
  ),
),
],
),
);
}
```



## Create Account

**SIGN UP**

Already have an account? [Login](#)

