Experiment 4

```
import 'package:flutter/material.dart';
class LoginPage extends StatefulWidget {
 @override
 LoginPageState createState() => LoginPageState();
}
class _LoginPageState extends State<LoginPage> {
 final emailController = TextEditingController();
 final _passwordController = TextEditingController();
 bool isLoading = false;
 String? _emailError;
 String? passwordError;
 bool validateEmail(String email) {
   if (email.isEmpty) {
     setState(() => emailError = 'Email is required');
     return false;
   }
   if (!email.contains('@') || !email.contains('.')) {
     setState(() => emailError = 'Please enter a valid email address');
     return false;
   setState(() => _emailError = null);
   return true;
  }
 bool validatePassword(String password) {
   if (password.isEmpty) {
      setState(() => _passwordError = 'Password is required');
     return false;
   if (password.length < 6) {</pre>
      setState(() => passwordError = 'Password must be at least 6
characters');
     return false;
   setState(() => _passwordError = null);
```

```
return true;
}
void _loginUser() {
  final email = emailController.text.trim();
  final password = _passwordController.text;
  // Validate both fields
  final isEmailValid = _validateEmail(email);
  final isPasswordValid = validatePassword(password);
  if (!isEmailValid || !isPasswordValid) {
    return;
  }
  setState(() {
    isLoading = true;
  });
  Future.delayed(Duration(seconds: 2), () {
    setState(() {
      _isLoading = false;
    });
    Navigator.pushNamedAndRemoveUntil(
     context,
      '/home',
          (route) => false,
    );
 });
}
@override
Widget build(BuildContext context) {
  return Scaffold(
    body: SingleChildScrollView(
      child: Container(
        height: MediaQuery.of(context).size.height,
        decoration: BoxDecoration(
          gradient: LinearGradient(
            begin: Alignment.topCenter,
```

```
end: Alignment.bottomCenter,
    colors: [Colors.blue[400]!, Colors.blue[800]!],
 ),
),
child: SafeArea(
  child: Padding(
   padding: EdgeInsets.all(24.0),
    child: Column (
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        IconButton(
          icon: Icon(Icons.arrow_back, color: Colors.white),
          onPressed: () => Navigator.pop(context),
        ),
        SizedBox(height: 32),
        Text(
          'Welcome Back',
          style: TextStyle(
            fontSize: 32,
            fontWeight: FontWeight.bold,
            color: Colors.white,
          ),
        ),
        SizedBox(height: 8),
        Text(
          'Sign in to continue',
          style: TextStyle(
            fontSize: 16,
            color: Colors.white.withOpacity(0.9),
          ),
        ),
        SizedBox(height: 48),
        Container (
          padding: EdgeInsets.all(24),
          decoration: BoxDecoration(
            color: Colors.white,
            borderRadius: BorderRadius.circular(16),
            boxShadow: [
              BoxShadow (
                color: Colors.black.withOpacity(0.1),
```

```
blurRadius: 10,
     offset: Offset(0, 5),
    ),
 ],
),
child: Column (
 children: [
    TextField(
      controller: emailController,
      decoration: InputDecoration(
        labelText: 'Email',
        hintText: 'Enter your email',
        prefixIcon: Icon(Icons.email),
        border: OutlineInputBorder(
          borderRadius: BorderRadius.circular(12),
        ),
        filled: true,
        fillColor: Colors.grey[100],
        errorText: _emailError,
        // Show red color when there's an error
        errorBorder: OutlineInputBorder(
          borderRadius: BorderRadius.circular(12),
          borderSide: BorderSide(color: Colors.red),
        ),
      ),
      keyboardType: TextInputType.emailAddress,
      onChanged: (value) {
        // Clear error when user starts typing
        if ( emailError != null) {
          setState(() => emailError = null);
        }
      },
    ),
    SizedBox(height: 16),
    TextField(
      controller: _passwordController,
      decoration: InputDecoration(
        labelText: 'Password',
        hintText: 'Enter your password',
        prefixIcon: Icon(Icons.lock),
```

```
border: OutlineInputBorder(
                            borderRadius: BorderRadius.circular(12),
                           ),
                           filled: true,
                           fillColor: Colors.grey[100],
                           errorText: _passwordError,
                           // Show red color when there's an error
                           errorBorder: OutlineInputBorder(
                            borderRadius: BorderRadius.circular(12),
                            borderSide: BorderSide(color: Colors.red),
                           ),
                        ),
                        obscureText: true,
                        onChanged: (value) {
                           // Clear error when user starts typing
                          if ( passwordError != null) {
                             setState(() => _passwordError = null);
                           }
                        },
                      ),
                    ),
                  ),
                ),
              ],
            ),
          ),
        ),
      ),
    ),
 );
}
@override
void dispose() {
  _emailController.dispose();
 _passwordController.dispose();
 super.dispose();
}
```

}

