Department of Information Technology

Academic Year: 2024-25
Semester: VI
Class / Branch / Div: TE- IT C
Subject: MAD & PWA Lab
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Date of Submission: 03/03/25

Experiment No.4

Aim : To Design an interactive Form using various form widgets.

Code :

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

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home: Scaffold(
        appBar: AppBar(title: Text("Student Registration Form")),
        body: StudentRegistrationForm(),
      ),
    );
  }
}

class StudentRegistrationForm extends StatefulWidget {
```

```
  @override
  _StudentRegistrationFormState createState() => _StudentRegistrationFormState();
}

class _StudentRegistrationFormState extends State<StudentRegistrationForm> {
  final _formKey = GlobalKey<FormState>();
  String? name;
  String? email;
  String? gender;
  String? course;
  String? password;

  // List of available courses
  final List<String> courses = ["Python", "Java", "C++", "HTML", "Bootstrap"];

  @override
  Widget build(BuildContext context) {
    return Form(
      key: _formKey,
      child: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            // Name field
            TextFormField(
              decoration: InputDecoration(labelText: 'Name'),
              validator: (value) {
                if (value == null || value.isEmpty) {
```

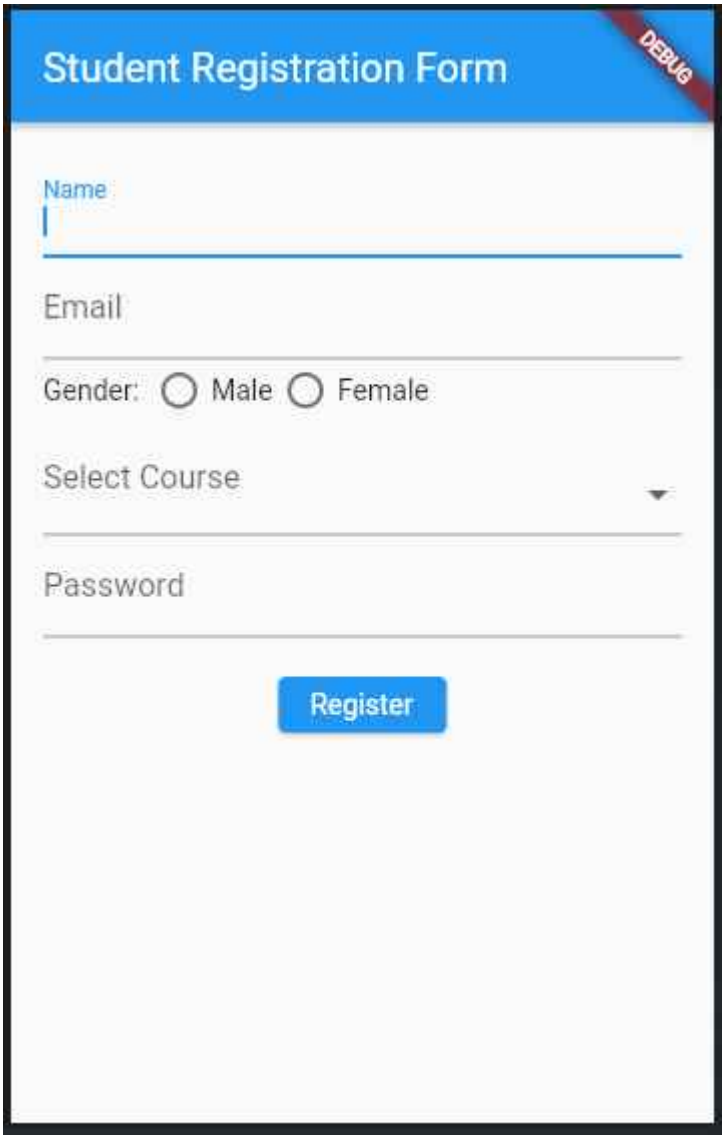
```
      return 'Please enter your name';
    }
    return null;
  },
  onChanged: (value) {
    name = value;
  },
),
// Email field
TextFormField(
  decoration: InputDecoration(labelText: 'Email'),
  validator: (value) {
    if (value == null || value.isEmpty) {
      return 'Please enter your email';
    } else if (!RegExp(r'\S+@\S+\.\S+').hasMatch(value)) {
      return 'Please enter a valid email';
    }
    return null;
  },
  onChanged: (value) {
    email = value;
  },
),
// Gender field using radio buttons
Row(
  children: [
    Text("Gender: "),
    Radio<String>(
```

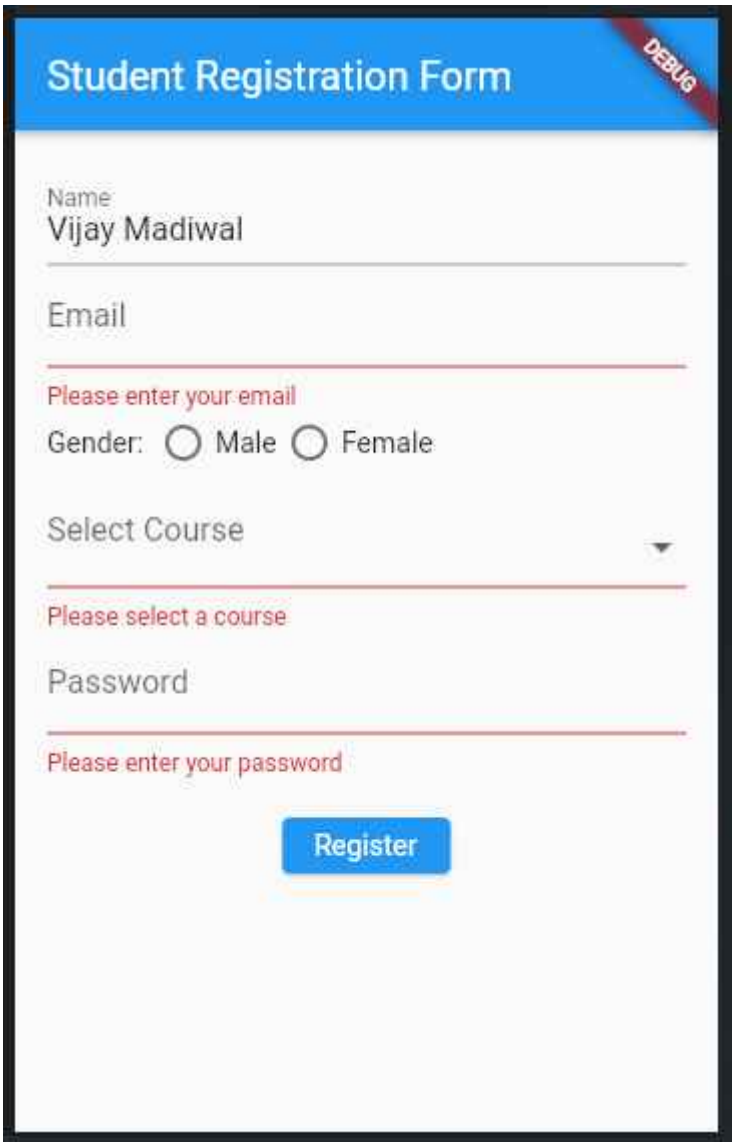
```
      value: "Male",
      groupValue: gender,
      onChanged: (String? value) {
        setState(() {
          gender = value;
        });
      },
    ),
    Text("Male"),
    Radio<String>(
      value: "Female",
      groupValue: gender,
      onChanged: (String? value) {
        setState(() {
          gender = value;
        });
      },
    ),
    Text("Female"),
  ],
),
// Course dropdown
DropdownButtonFormField<String>(
  decoration: InputDecoration(labelText: 'Select Course'),
  value: course,
  items: courses.map((String course) {
    return DropdownMenuItem<String>(
      value: course,
```

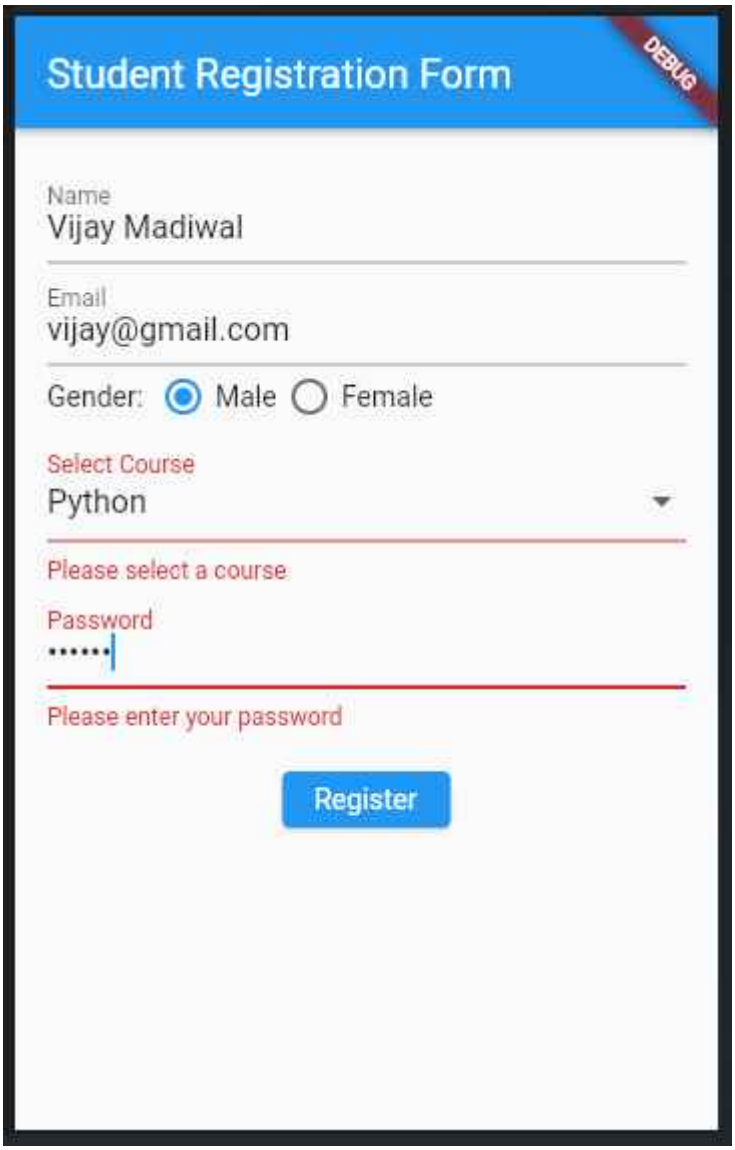
```
      child: Text(course),
    );
  }).toList(),
  onChanged: (String? value) {
    setState(() {
      course = value;
    });
  },
  validator: (value) {
    if (value == null || value.isEmpty) {
      return 'Please select a course';
    }
    return null;
  },
),
// Password field
TextFormField(
  decoration: InputDecoration(labelText: 'Password'),
  obscureText: true,
  validator: (value) {
    if (value == null || value.isEmpty) {
      return 'Please enter your password';
    }
    return null;
  },
  onChanged: (value) {
    password = value;
  },
```

```
            ),
            SizedBox(height: 20),
            // Submit button
            ElevatedButton(
              onPressed: () {
                if (_formKey.currentState!.validate()) {
                  ScaffoldMessenger.of(context).showSnackBar(
                    SnackBar(content: Text('Student Registered Successfully')),
                  );
                }
              },
              child: Text('Register'),
            ),
          ],
        ),
      ),
    );
  }
}
```

Output :


Student Registration Form
DEBUG
Name
Email
Gender: Male Female
Select Course
Password
Register


Student Registration Form
DEBUG
Name
Vijay Madiwal
Email
Please enter your email
Gender: Male Female
Select Course
Please select a course
Password
Please enter your password
Register



Conclusion : In this experiment we have designed an interactive form by using various form widgets.