



Bharatiya Vidya Bhavan's
SARDAR PATEL INSTITUTE OF TECHNOLOGY
(Autonomous Institute Affiliated to University of Mumbai)
Munshi Nagar, Andheri (W), Mumbai – 400 058.
Department of Computer Science and Engineering

Experiment	2
Aim	Create Dynamic Registration form
Objective	To Create Dynamic Registration form using UI components and Scaffold elements.
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Class	FY-MCA
Batch	A
Date of Submission	02-02-2025

Technology used	Framework- Flutter, Tool used - Android Studio Programming- Dart
Task	Create Dynamic Webpage for submitting review for movie app along with giving ratings for the same. The webpage should include, name, surname, date of birth, address, email id, phone number, gender, review and ratings for the movie in terms of stars/smiley etc. include validation. The information should be fetched and displayed on the next page for viewing it. Use snackbar, alert dialog box, try adding fan button (static) etc.
Code with proper label	main.dart: <pre>import 'package:flutter/material.dart'; import 'package:flutter_rating_bar/flutter_rating_bar.dart'; import 'review_display.dart'; void main() { runApp(MaterialApp(home: ReviewForm(), debugShowCheckedModeBanner: false,)); } class ReviewForm extends StatefulWidget { const ReviewForm({super.key}); @override _ReviewFormState createState() => _ReviewFormState(); } class _ReviewFormState extends State<ReviewForm> { final _formKey = GlobalKey<FormState>(); // Controllers for text fields TextEditingController nameController = TextEditingController(); TextEditingController surnameController = TextEditingController(); TextEditingController dobController = TextEditingController(); TextEditingController addressController = TextEditingController(); TextEditingController emailController = TextEditingController(); TextEditingController phoneController = TextEditingController(); TextEditingController reviewController = TextEditingController(); String? gender; double rating = 3.0;</pre>



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```
void _submitForm() {
  if (_formKey.currentState!.validate()) {
    // Navigate to Display Page
    Navigator.push(
      context,
      MaterialPageRoute(
        builder: (context) => ReviewDisplay(
          name: nameController.text,
          surname: surnameController.text,
          dob: dobController.text,
          address: addressController.text,
          email: emailController.text,
          phone: phoneController.text,
          gender: gender!,
          review: reviewController.text,
          rating: rating,
        ),
      ),
    );
  }
}

// Show Snackbar
ScaffoldMessenger.of(context).showSnackBar(
  SnackBar(content: Text("Review Submitted Successfully!")),
);
}

void _showFanDialog() {
  showDialog(
    context: context,
    builder: (context) => AlertDialog(
      title: Text("Fan Button"),
      content: Text("You clicked the fan button!"),
      actions: [
        TextButton(onPressed: () => Navigator.pop(context), child: Text("OK"))
      ],
    ),
  );
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(title: Text("Movie Review Form")),
    body: Padding(
      padding: EdgeInsets.all(16.0),
      child: Form(
        key: _formKey,
        child: SingleChildScrollView(
          child: Column(
            children: [
              TextFormField(
                key: Key('nameField'),
                controller: nameController,
                decoration: InputDecoration(labelText: "Name"),
                validator: (value) => value!.isEmpty ? "Enter Name" : null,
              ),
              TextFormField(
                key: Key('surnameField'),
                controller: surnameController,
```



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```
decoration: InputDecoration(labelText: "Surname"),
validator: (value) => value!.isEmpty ? "Enter Surname" : null,
),
TextFormField(
  key: Key('dobField'),
  controller: dobController,
  decoration: InputDecoration(labelText: "Date of Birth"),
  validator: (value) => value!.isEmpty ? "Enter DOB" : null,
),
TextFormField(
  key: Key('addressField'),
  controller: addressController,
  decoration: InputDecoration(labelText: "Address"),
  validator: (value) => value!.isEmpty ? "Enter Address" : null,
),
TextFormField(
  key: Key('emailField'),
  controller: emailController,
  decoration: InputDecoration(labelText: "Email ID"),
  validator: (value) => value!.contains("@") ? null : "Enter valid
Email",
),
TextFormField(
  key: Key('phoneField'),
  controller: phoneController,
  decoration: InputDecoration(labelText: "Phone Number"),
  validator: (value) => value!.length == 10 ? null : "Enter valid
Phone Number",
),
Row(
  mainAxisAlignment: MainAxisAlignment.center,
  children: [
    Text("Gender: "),
    Radio(
      key: Key('maleRadio'),
      value: "Male",
      groupValue: gender,
      onChanged: (value) => setState(() => gender =
value.toString()),
    ),
    Text("Male"),
    Radio(
      key: Key('femaleRadio'),
      value: "Female",
      groupValue: gender,
      onChanged: (value) => setState(() => gender =
value.toString()),
    ),
    Text("Female"),
  ],
),
TextFormField(
  key: Key('reviewField'),
  controller: reviewController,
  decoration: InputDecoration(labelText: "Review"),
  validator: (value) => value!.isEmpty ? "Enter Review" : null,
),
SizedBox(height: 10),
Text("Rating:"),
RatingBar.builder(
  initialRating: 3,
```



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```
minRating: 1,
direction: Axis.horizontal,
allowHalfRating: true,
itemCount: 5,
itemBuilder: (context, _) => Icon(Icons.star, color:
Colors.amber),
onRatingUpdate: (ratingValue) => setState(() => rating =
ratingValue),
),
SizedBox(height: 20),
ElevatedButton(
key: Key('submitButton'),
onPressed: _submitForm,
child: Text("Submit Review"),
),
SizedBox(height: 20),
ElevatedButton(
key: Key('fanButton'),
onPressed: _showFanDialog,
child: Text("Fan Button"),
),
),
],
),
),
),
),
),
);
}
```

review_display.dart:

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

class ReviewDisplay extends StatelessWidget {
  final String name;
  final String surname;
  final String dob;
  final String address;
  final String email;
  final String phone;
  final String gender;
  final String review;
  final double rating;

  ReviewDisplay({
    required this.name,
    required this.surname,
    required this.dob,
    required this.address,
    required this.email,
    required this.phone,
    required this.gender,
    required this.review,
    required this.rating,
  });

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("Review Summary")),
```



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```
body: Padding(
  padding: EdgeInsets.all(16.0),
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      Text("Name: $name", style: TextStyle(fontSize: 18)),
      Text("Surname: $surname", style: TextStyle(fontSize: 18)),
      Text("Date of Birth: $dob", style: TextStyle(fontSize: 18)),
      Text("Address: $address", style: TextStyle(fontSize: 18)),
      Text("Email: $email", style: TextStyle(fontSize: 18)),
      Text("Phone: $phone", style: TextStyle(fontSize: 18)),
      Text("Gender: $gender", style: TextStyle(fontSize: 18)),
      Text("Review: $review", style: TextStyle(fontSize: 18)),
      Text("Rating: ${rating.toString()}", style: TextStyle(fontSize: 18)),
    ],
  ),
),
);
}
```

Screenshots

Movie Review Form

Name

Surname

Date of Birth

Address

Email ID

Phone Number

Gender: ☐ Male ☐ Female

Review

Rating: 3 stars

Submit Review

Fan Button

Movie Review Form

Name: Abhijeet

Surname: Jadhav

Date of Birth: 24-11-2002

Address: Thane

Email ID: abhijeet.jadhav24@spit.ac.in

Phone Number: 8108255374

Gender: ☒ Male ☐ Female

Review: Nice Movie

Rating: 3 stars

Submit Review

Fan Button

Review Summary

Name: Abhijeet

Surname: Jadhav

Date of Birth: 24-11-2002

Address: Thane

Email: abhijeet.jadhav24@spit.ac.in

Phone: 8108255374

Gender: Male

Review: Nice Movie

Rating: 3.0

Review Submitted Successfully!

Movie Review Form

Name

Surname

Date of Birth

Address

Email ID

Phone Number

Gender: ☐ Male ☐ Female

Review

Rating: 3 stars

Submit Review

Fan Button

Fan Button

You clicked the fan button!

OK

Movie Review Form

Name

Enter Name

Surname

Enter Surname

Date of Birth

Enter DOB

Address

Enter Address

Email ID

Enter valid Email

Phone Number

Enter valid Phone Number

Gender: ☐ Male ☐ Female

Review

Enter Review

Rating: 3 stars

Submit Review



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Question and Answers	<p>Answer the following Questions:</p> <p>1. How to create snackbar? Which component of flutter it belongs to?</p> <p>Ans : A Snackbar in Flutter is a Material component used to display short messages at the bottom of the screen. It is often used for brief notifications or alerts. The ScaffoldMessenger widget is responsible for showing it in the UI. A Snackbar can include text, actions (like an undo button), and disappears automatically after a short duration.</p> <p>2. How to give validation to any field in flutter?</p> <p>Ans: In Flutter, field validation is handled with the Form and TextFormField widgets. Validation logic is set using the validator property of TextFormField, which returns an error message if the input is invalid or null if the input is valid. To validate multiple fields, the FormState is accessed through formKey.currentState!.validate(). Common validation tasks include ensuring fields are not empty, verifying email formats, and checking password strength.</p> <p>3. How to navigate from one page to another.</p> <p>Ans: In Flutter, navigating from one page (screen) to another is typically done using the Navigator class. You can push a new route (screen) onto the navigation stack and pop it to go back. Here are the main ways to navigate in Flutter</p> <p>Navigate with Navigator.push(context, MaterialPageRoute(...))</p> <p>4. How are values of variables fetched in flutter.</p> <p>Ans: In Flutter, values can be fetched using StatefulWidget by managing variables within the state and updating them with setState(). You can retrieve user input from TextFormField using a TextEditingController. For external data, values are fetched asynchronously from APIs or databases using Future or Stream. Values are then updated in the UI using setState() to reflect changes.</p>
Conclusion	<p>In this session, I learned how to manage and fetch values in Flutter using StatefulWidget for dynamic updates, and how to retrieve user input with TextEditingController. I also learned how to fetch data asynchronously from external sources like APIs using Future and update the UI with the fetched data. These concepts help in creating interactive and responsive Flutter applications.</p>