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MPL Practical 04

Aim: To create an interactive Form using form widget

Theory:

Forms are an essential part of mobile applications, allowing users to input and submit data. In Flutter, the Form widget provides an organized way to collect and validate user input. It works with TextFormField and DropdownButtonFormField to ensure structured data entry. The GlobalKey<FormState> is used to manage form validation and submission.

Implementation in Code

In our implementation, we created an interactive form to allow users to create a sports team. The key components include:

- Form Widget: Wraps input fields for validation.
- TextFormField: Captures the team name with validation.
- DropdownButtonFormField: Allows users to select a sport.
- Validation: Ensures fields are not left empty.
- Snackbar Feedback: Displays a success message when the form is submitted.

CODE:

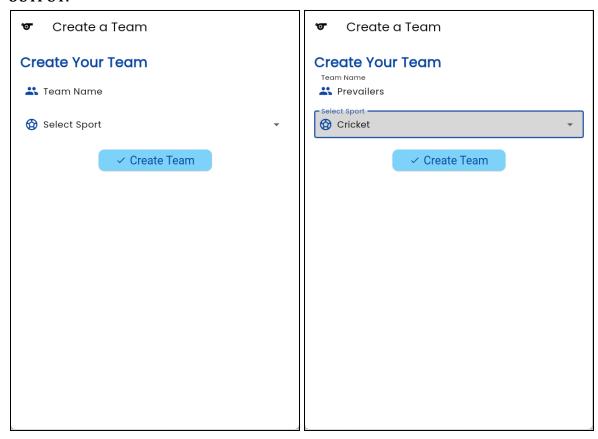
```
import 'package:flutter/material.dart';
void main() {
runApp(TeamFinderApp());
}
class TeamFinderApp extends StatelessWidget {
@override
Widget build(BuildContext context) {
  return MaterialApp(
  debugShowCheckedModeBanner: false,
  title: 'Team Finder',
   theme: ThemeData(
   primarySwatch: Colors.blue,
   fontFamily: 'Poppins', // Custom font
    colorScheme: ColorScheme.fromSwatch().copyWith(
    primary: Colors.blue[900],
    secondary: Colors.blue[700],
   ),
   visualDensity: VisualDensity.adaptivePlatformDensity,
  ),
```

```
home: CreateTeamScreen(), // Directly opening the form screen
 );
}
}
class CreateTeamScreen extends StatefulWidget {
@override
_CreateTeamScreenState createState() => _CreateTeamScreenState();
}
class _CreateTeamScreenState extends State<CreateTeamScreen> {
final _formKey = GlobalKey<FormState>(); // Form key for validation
String?_teamName;
String?_selectedSport;
List<String> sports = ['Football', 'Basketball', 'Cricket', 'Tennis'];
void _submitForm() {
  if (_formKey.currentState!.validate()) {
   _formKey.currentState!.save();
   ScaffoldMessenger.of(context).showSnackBar(
   SnackBar(content: Text('Team $_teamName for $_selectedSport created!')),
  );
  }
}
@override
Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
   title: Text('Create a Team'),
   leading: Icon(Icons.sports), // Icon in AppBar
   ),
   body: Padding(
   padding: EdgeInsets.all(16.0),
   child: Form(
    key: _formKey,
     child: Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
      Text(
        'Create Your Team',
```

```
style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold, color: Colors.blue[900]),
),
SizedBox(height: 10),
TextFormField(
 decoration: InputDecoration(
 labelText: 'Team Name',
 prefixIcon: Icon(Icons.group, color: Colors.blue[900]),
 border: OutlineInputBorder(),
),
 validator: (value) {
 if (value == null || value.isEmpty) return 'Please enter a team name';
 return null;
},
 onSaved: (value) => _teamName = value,
),
SizedBox(height: 10),
DropdownButtonFormField<String>(
 decoration: InputDecoration(
 labelText: 'Select Sport',
 prefixIcon: Icon(Icons.sports_soccer, color: Colors.blue[900]),
 border: OutlineInputBorder(),
),
 items: sports.map((sport) {
 return DropdownMenuItem(
  value: sport,
   child: Text(sport),
 );
}).toList(),
 validator: (value) => value == null ? 'Please select a sport' : null,
 onChanged: (value) {
 setState(() {
  _selectedSport = value;
 });
},
),
SizedBox(height: 20),
Center(
 child: ElevatedButton.icon(
 onPressed: _submitForm,
 icon: Icon(Icons.check),
 label: Text('Create Team'),
```

```
style: ElevatedButton.styleFrom(
    backgroundColor: Colors.lightBlue[200],
    padding: EdgeInsets.symmetric(horizontal: 30, vertical: 15),
    textStyle: TextStyle(fontSize: 20),
    shape: RoundedRectangleBorder(
    borderRadius: BorderRadius.circular(10),
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```

OUTPUT:



Conclusion:

In this experiment, we successfully implemented an interactive form using the Form widget, allowing users to create a sports team with validation and user feedback. Initially, we faced issues with form validation not triggering properly, but we resolved it by ensuring that GlobalKey<FormState> was correctly linked and validation checks were properly implemented.