

FLUTTER : STUDENT CONNECT

For app source code visit :

<https://github.com/carry2408/Flutter/tree/master>

About the Student Connect App

Welcome to Student Connect, your personal mobile command center.

Designed for students, it centralizes essential daily tools in one place.

The app features a sleek, custom-built dark space theme for a unique look.

Instantly check a 3-day weather forecast to plan your week ahead.

Manage your assignments with a full-featured, persistent to-do list.

You can create, edit, and delete tasks that save locally on your device.

Easily send inquiries directly to an administrator using the contact form.

Navigate effortlessly through all features using dashboard shortcuts.

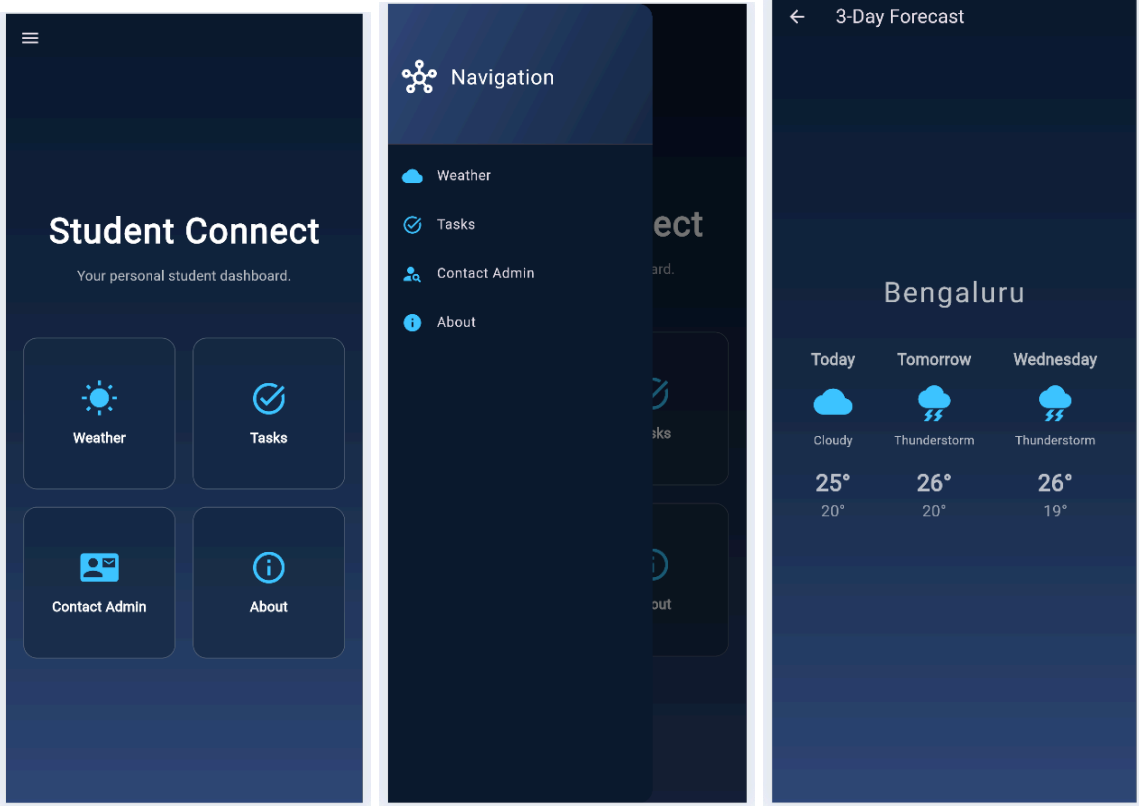
A classic slide-out drawer is also available for alternative navigation.

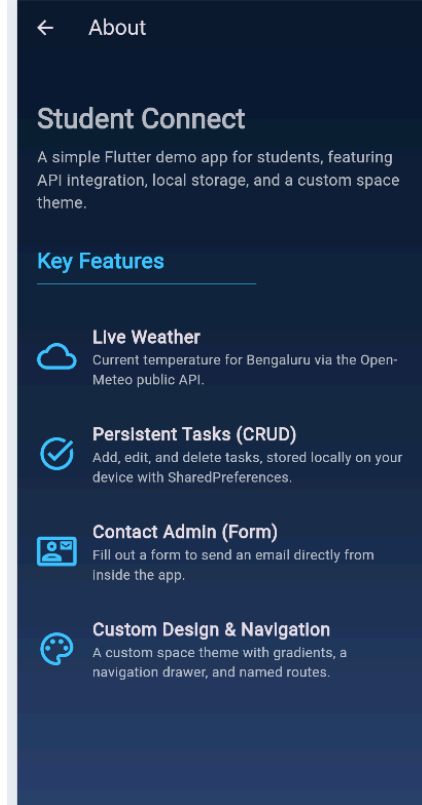
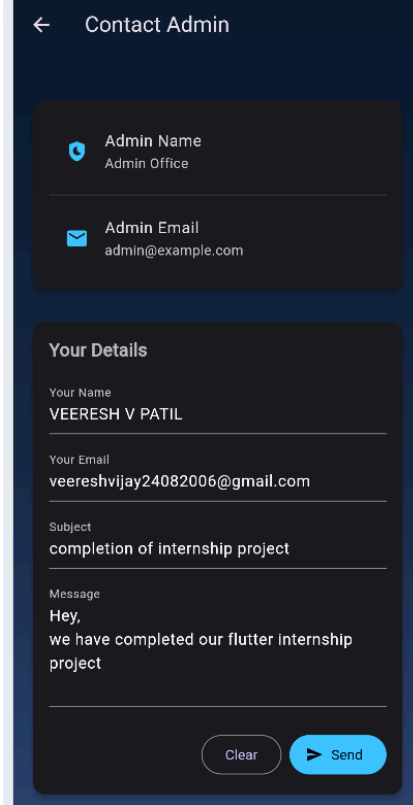
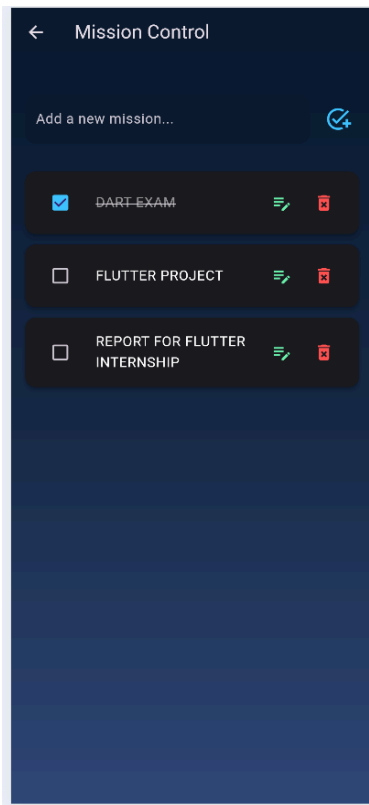
It's the all-in-one utility to keep your student life organized.

STRUCTURE OF STUDENT CONNECT APP

```
student_connect/  
├── lib/  
│   ├── main.dart  
│   ├── models/  
│   │   └── task_model.dart  
│   └── screens/  
│       ├── home_screen.dart  
│       ├── weather_screen.dart  
│       ├── tasks_screen.dart  
│       ├── profile_screen.dart  
│       └── about_screen.dart  
└── pubspec.yaml
```

PHOTO OF APP





Main.dart

```

lib > main.dart > StudentConnectApp > build
1  import 'package:flutter/material.dart';
2  import 'package:student_connect/screens/about_screen.dart';
3  import 'package:student_connect/screens/home_screen.dart';
4  import 'package:student_connect/screens/profile_screen.dart';
5  import 'package:student_connect/screens/tasks_screen.dart';
6  import 'package:student_connect/screens/weather_screen.dart';
7
8  Run | Debug | Profile
9  void main() {
10   runApp(const StudentConnectApp());
11 }
12
13 class StudentConnectApp extends StatelessWidget {
14   const StudentConnectApp({super.key});
15
16   @override
17   Widget build(BuildContext context) {
18     return MaterialApp(
19       title: 'Student Connect',
20       debugShowCheckedModeBanner: false,
21       // Reverting to our dark space theme
22       theme: ThemeData(
23         brightness: Brightness.dark,
24         primaryColor: Colors.blue[300],
25         scaffoldBackgroundColor: const Color(0xFF0A192F), // A deep blue
26         appBarTheme: const AppBarTheme(
27           backgroundColor: Colors.transparent, // Transparent AppBar
28           elevation: 0,
29         ), // AppBarTheme
30         cardColor: const Color(0xFF172A46), // A slightly lighter navy for cards
31         textTheme: const TextTheme(
32           bodyLarge: TextStyle(color: Colors.white),
33           bodyMedium: TextStyle(color: Colors.white70),
34           titleLarge: TextStyle(color: Colors.white),
35         ), // TextTheme
36       ), // ThemeData
37       initialRoute: '/',
38       routes: {
39         '/': (context) => const HomeScreen(),
40         '/weather': (context) => const WeatherScreen(),
41         '/tasks': (context) => const TasksScreen(),
42         '/profile': (context) => const ProfileScreen(),
43         '/about': (context) => const AboutScreen(),
44       },
45     ); // MaterialApp
46   }
47 }

```

Task_model.dart

```

lib > models > task_model.dart > Task > Task.fromMap
1  // lib/models/task_model.dart
2
3  import 'dart:convert';
4
5  class Task {
6    String id;
7    String title;
8    bool isDone;
9
10   Task({required this.id, required this.title, this.isDone = false});
11
12   // Converts a Task object into a simple map
13   Map<String, dynamic> toMap() => {
14     "id": id,
15     "title": title,
16     "isDone": isDone,
17   };
18
19   // Creates a Task object from a map
20   factory Task.fromMap(Map<String, dynamic> map) => Task(
21     id: map["id"],
22     title: map["title"],
23     isDone: map["isDone"],
24   );
25
26   // Converts a Task object into a JSON string
27   String toJson() => json.encode(toMap());
28
29   // Creates a Task object from a JSON string
30   factory Task.fromJson(String source) => Task.fromMap(json.decode(source));
31 }
32

```

3. Home_screen.dart

```

import 'package:flutter/material.dart';

class HomeScreen extends StatelessWidget {
  const HomeScreen({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      drawer: _buildDrawer(context), // The navigation drawer
      appBar: AppBar(
        // The AppBar is transparent, so the gradient shows through

```

```

    ),
    extendBodyBehindAppBar: true,
    body: Container(
      width: double.infinity,
      height: double.infinity,
      // The gradient background
      decoration: const BoxDecoration(
        gradient: LinearGradient(
          colors: [Color(0xFF0A192F), Color(0xFF172A46),
Color(0xFF304878)],
          begin: Alignment.topCenter,
          end: Alignment.bottomCenter,
        ),
      ),
    child: SafeArea(
      child: Padding(
        padding: const EdgeInsets.symmetric(horizontal: 20.0),
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            // App Name Title
            const Text(
              'Student Connect',
              style: TextStyle(
                fontSize: 40,
                fontWeight: FontWeight.bold,
                color: Colors.white,
                letterSpacing: 1.2,
              ),
            ),
            const SizedBox(height: 12),
            const Text(
              'Your personal student dashboard.',
              style: TextStyle(
                fontSize: 16,
                color: Colors.white70,
              ),
            ),
            const SizedBox(height: 60),

```

```

// Grid of shortcut icons
GridView.count(
  crossAxisCount: 2,
  shrinkWrap: true,
  physics: const NeverScrollableScrollPhysics(),
  crossAxisSpacing: 20,
  mainAxisSpacing: 20,
  children: [
    _buildShortcutCard(
      context: context,
      icon: Icons.wb_sunny,
      label: 'Weather',
      routeName: '/weather',
    ),
    _buildShortcutCard(
      context: context,
      icon: Icons.task_alt,
      label: 'Tasks',
      routeName: '/tasks',
    ),
    _buildShortcutCard(
      context: context,
      icon: Icons.contact_mail,
      label: 'Contact Admin',
      routeName: '/profile',
    ),
    _buildShortcutCard(
      context: context,
      icon: Icons.info_outline,
      label: 'About',
      routeName: '/about',
    ),
  ],
),
],
),
),
),
),
),
);

```



```

}

// Helper widget for the styled shortcut cards
Widget _buildShortcutCard({
  required BuildContext context,
  required IconData icon,
  required String label,
  required String routeName,
}) {
  return InkWell(
    onTap: () => Navigator.pushNamed(context, routeName),
    borderRadius: BorderRadius.circular(16),
    child: Container(
      decoration: BoxDecoration(
        color: Theme.of(context).cardColor.withOpacity(0.8),
        borderRadius: BorderRadius.circular(16),
        border: Border.all(color: Colors.white24, width: 1),
      ),
      child: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          Icon(icon, size: 44, color: Colors.lightBlueAccent),
          const SizedBox(height: 12),
          Text(
            label,
            textAlign: TextAlign.center,
            style: const TextStyle(
              fontSize: 16,
              fontWeight: FontWeight.w600,
              color: Colors.white,
            ),
          ),
        ],
      ),
    ),
  );
}

// The drawer from our original space theme
Widget _buildDrawer(BuildContext context) {

```

```

return Drawer(
  backgroundColor: const Color(0xFF0A192F), // Match the dark theme
  child: ListView(
    padding: EdgeInsets.zero,
    children: <Widget>[
      const DrawerHeader(
        decoration: BoxDecoration(
          gradient: LinearGradient(
            colors: [Color(0xFF304878), Color(0xFF172A46)],
            begin: Alignment.topLeft,
            end: Alignment.bottomRight,
          ),
        ),
      ),
      child: Row(
        children: [
          Icon(Icons.hub_outlined, color: Colors.white, size: 40),
          SizedBox(width: 16),
          Text('Navigation',
            style: TextStyle(color: Colors.white, fontSize: 24)),
        ],
      ),
    ),
    ListTile(
      leading:
        const Icon(Icons.wb_cloudy, color:
Colors.lightBlueAccent),
      title: const Text('Weather'),
      onTap: () => Navigator.pushNamed(context, '/weather')),
    ListTile(
      leading:
        const Icon(Icons.task_alt, color:
Colors.lightBlueAccent),
      title: const Text('Tasks'),
      onTap: () => Navigator.pushNamed(context, '/tasks')),
    ListTile(
      leading: const Icon(Icons.person_search,
        color: Colors.lightBlueAccent),
      title: const Text('Contact Admin'),
      onTap: () => Navigator.pushNamed(context, '/profile')),
    ListTile(

```

```

        leading: const Icon(Icons.info, color:
Colors.lightBlueAccent),
        title: const Text('About'),
        onTap: () => Navigator.pushNamed(context, '/about')),
    ],
  ),
);
}
}

```

Profile_screen.dart

```

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

class ProfileScreen extends StatefulWidget {
  const ProfileScreen({super.key});

  @override
  State<ProfileScreen> createState() => _ProfileScreenState();
}

class _ProfileScreenState extends State<ProfileScreen> {
  // A key to identify and validate our form
  final _formKey = GlobalKey<FormState>();

  // Controllers to manage the text in each field
  final _nameController = TextEditingController();
  final _emailController = TextEditingController();
  final _subjectController = TextEditingController();
  final _messageController = TextEditingController();

  // The admin's email address
  final String _adminEmail = 'admin@example.com';

  @override
  void dispose() {
    // Clean up the controllers when the widget is removed
  }
}

```

```

    _nameController.dispose();
    _emailController.dispose();
    _subjectController.dispose();
    _messageController.dispose();
    super.dispose();
}

// --- Functionality ---

void _clearForm() {
    _nameController.clear();
    _emailController.clear();
    _subjectController.clear();
    _messageController.clear();
}

Future<void> _sendEmail() async {
    // Validate the form first
    if (_formKey.currentState!.validate()) {
        final Email email = Email(
            // The body of the email includes the user's details
            body: '''
                Message:
                ${_messageController.text}

                ---
                From: ${_nameController.text}
                Email: ${_emailController.text}
            ''',
            subject: _subjectController.text,
            recipients: [_adminEmail], // Send to the admin
            isHTML: false,
        );

        try {
            await FlutterEmailSender.send(email);
            ScaffoldMessenger.of(context).showSnackBar(
                const SnackBar(content: Text('Email client opened.')),
            );
        } catch (error) {

```

```

        ScaffoldMessenger.of(context).showSnackBar(
            SnackBar(content: Text('Could not open email client: $error')),
        );
    }
}

// --- UI ---

@override
Widget build(BuildContext context) {
    return Scaffold(
        appBar: AppBar(
            title: const Text('Contact Admin'),
            backgroundColor: Colors.transparent,
            elevation: 0,
        ),
        extendBodyBehindAppBar: true,
        body: Container(
            width: double.infinity,
            height: double.infinity,
            decoration: const BoxDecoration(
                gradient: LinearGradient(
                    colors: [Color(0xFF0A192F), Color(0xFF172A46),
Color(0xFF304878)],
                    begin: Alignment.topCenter,
                    end: Alignment.bottomCenter,
                ),
            ),
            // Use a ListView to prevent overflow on small screens
            child: SingleChildScrollView(
                padding: const EdgeInsets.fromLTRB(16, 100, 16, 16),
                child: Column(
                    children: [
                        // Admin Details Card
                        _buildAdminDetailsCard(),
                        const SizedBox(height: 24),
                        // User Details Form Card
                        _buildUserDetailsForm(),
                    ],
                ),
            ),
        ),
    );
}

```

```

        ),
      ),
    ),
  );
}

Widget _buildAdminDetailsCard() {
  return Card(
    elevation: 4,
    shape: RoundedRectangleBorder(borderRadius:
BorderRadius.circular(12)),
    child: const Padding(
      padding: EdgeInsets.all(16.0),
      child: Column(
        children: [
          ListTile(
            leading: Icon(Icons.shield_moon, color:
Colors.lightBlueAccent),
            title: Text('Admin Name'),
            subtitle: Text('Admin Office'),
          ),
          Divider(),
          ListTile(
            leading: Icon(Icons.email, color: Colors.lightBlueAccent),
            title: Text('Admin Email'),
            subtitle: Text('admin@example.com'),
          ),
        ],
      ),
    ),
  );
}

Widget _buildUserDetailsForm() {
  return Card(
    elevation: 4,
    shape: RoundedRectangleBorder(borderRadius:
BorderRadius.circular(12)),
    child: Padding(
      padding: const EdgeInsets.all(16.0),

```

```

child: Form(
  key: _formKey,
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.stretch,
    children: [
      const Text('Your Details',
        style: TextStyle(fontSize: 18, fontWeight:
FontWeight.bold)),
      const SizedBox(height: 16),
      TextFormField(
        controller: _nameController,
        decoration: const InputDecoration(labelText: 'Your Name'),
        validator: (v) => v!.isEmpty ? 'Please enter your name' :
null,
      ),
      const SizedBox(height: 12),
      TextFormField(
        controller: _emailController,
        decoration: const InputDecoration(labelText: 'Your Email'),
        keyboardType: TextInputType.emailAddress,
        validator: (v) => v!.isEmpty ? 'Please enter your email' :
null,
      ),
      const SizedBox(height: 12),
      TextFormField(
        controller: _subjectController,
        decoration: const InputDecoration(labelText: 'Subject'),
        validator: (v) => v!.isEmpty ? 'Please enter a subject' :
null,
      ),
      const SizedBox(height: 12),
      TextFormField(
        controller: _messageController,
        decoration: const InputDecoration(labelText: 'Message'),
        maxLines: 4,
        validator: (v) => v!.isEmpty ? 'Please enter a message' :
null,
      ),
      const SizedBox(height: 24),
      Row(

```

```

        mainAxisAlignment: MainAxisAlignment.end,
        children: [
          OutlinedButton(
            onPressed: _clearForm,
            child: const Text('Clear'),
          ),
          const SizedBox(width: 8),
          ElevatedButton.icon(
            onPressed: _sendEmail,
            icon: const Icon(Icons.send),
            label: const Text('Send'),
            style: ElevatedButton.styleFrom(
              backgroundColor: Colors.lightBlueAccent,
              foregroundColor: Colors.black,
            ),
          ),
        ],
      ),
    ],
  ),
),
);
}
}

```


Task_screen.dart

```
// lib/screens/tasks_screen.dart

import 'package:flutter/material.dart';
import 'package:shared_preferences/shared_preferences.dart';
import 'package:student_connect/models/task_model.dart'; // Import our new
model

class TasksScreen extends StatefulWidget {
  const TasksScreen({super.key});

  @override
  State<TasksScreen> createState() => _TasksScreenState();
}

class _TasksScreenState extends State<TasksScreen> {
  final List<Task> _tasks = [];
  final TextEditingController _taskController = TextEditingController();
  static const String _tasksKey = 'tasks_list_key';

  @override
  void initState() {
    super.initState();
    _loadTasks(); // Load tasks when the app starts
  }

  // ---- CRUD Logic ----

  // READ from local storage
  Future<void> _loadTasks() async {
    final prefs = await SharedPreferences.getInstance();
    final List<String> taskListJson = prefs.getStringList(_tasksKey) ?? [];
    setState(() {
      _tasks.clear();
      _tasks.addAll(taskListJson.map((json) => Task.fromJson(json)));
    });
  }

  // Helper method to SAVE all tasks to local storage
```

```

Future<void> _saveTasks() async {
    final prefs = await SharedPreferences.getInstance();
    final List<String> taskListJson =
        _tasks.map((task) => task.toJson()).toList();
    await prefs.setStringList(_tasksKey, taskListJson);
}

// CREATE a new task
void _addTask(String title) {
    if (title.isNotEmpty) {
        final newTask = Task(id: DateTime.now().toString(), title: title);
        setState(() {
            _tasks.add(newTask);
        });
        _saveTasks();
        _taskController.clear();
        FocusScope.of(context).unfocus(); // Close keyboard
    }
}

// UPDATE an existing task's completion status
void _toggleTaskStatus(Task task) {
    setState(() {
        task.isDone = !task.isDone;
    });
    _saveTasks();
}

// UPDATE an existing task's title
void _editTaskTitle(Task task, String newTitle) {
    if (newTitle.isNotEmpty) {
        setState(() {
            task.title = newTitle;
        });
        _saveTasks();
    }
}

// DELETE a task
void _deleteTask(String id) {

```

```

    setState(() {
      _tasks.removeWhere((task) => task.id == id);
    });
    _saveTasks();
  }

  // ---- UI ----

  // Dialog for editing a task
  void _showEditTaskDialog(Task task) {
    final editController = TextEditingController(text: task.title);
    showDialog(
      context: context,
      builder: (context) => AlertDialog(
        backgroundColor: const Color(0xFF172A46),
        title: const Text('Edit Mission'),
        content: TextField(
          controller: editController,
          autofocus: true,
          decoration: const InputDecoration(labelText: 'New mission
title'),
        ),
        actions: [
          TextButton(
            child: const Text('Cancel'),
            onPressed: () => Navigator.pop(context),
          ),
          ElevatedButton(
            style: ElevatedButton.styleFrom(
              backgroundColor: Colors.lightBlueAccent),
            child: const Text('Save', style: TextStyle(color:
Colors.black)),
            onPressed: () {
              _editTaskTitle(task, editController.text);
              Navigator.pop(context);
            },
          ),
        ],
      ),
    );
  }

```

```

}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: const Text('Mission Control'),
      backgroundColor: Colors.transparent,
      elevation: 0,
    ),
    extendBodyBehindAppBar: true,
    body: Container(
      width: double.infinity,
      decoration: const BoxDecoration(
        gradient: LinearGradient(
          colors: [Color(0xFF0A192F), Color(0xFF172A46),
Color(0xFF304878)],
          begin: Alignment.topCenter,
          end: Alignment.bottomCenter,
        ),
      ),
      child: Column(
        children: [
          // Input field for adding new tasks
          _buildAddTaskUI(),
          // List of tasks
          Expanded(
            child: _tasks.isEmpty
              ? const Center(child: Text("No missions assigned. Add
one!"))
              : ListView.builder(
                  padding: const EdgeInsets.only(top: 10),
                  itemCount: _tasks.length,
                  itemBuilder: (context, index) {
                    final task = _tasks[index];
                    return _buildTaskCard(task);
                  },
                ),
          ),
        ],
      ),
    ),
  );
}

```

```

    ),
  ),
);
}

// UI for the input field
Widget _buildAddTaskUI() {
  return Padding(
    padding: const EdgeInsets.fromLTRB(16, 100, 16, 16),
    child: Row(
      children: [
        Expanded(
          child: TextField(
            controller: _taskController,
            decoration: InputDecoration(
              hintText: 'Add a new mission...',
              filled: true,
              fillColor: const Color(0xFF0A192F).withOpacity(0.7),
              border: OutlineInputBorder(
                borderRadius: BorderRadius.circular(12),
                borderSide: BorderSide.none,
              ),
            ),
            onSubmitted: (value) => _addTask(value),
          ),
        const SizedBox(width: 8),
        IconButton(
          icon: const Icon(Icons.add_task),
          iconSize: 30,
          color: Colors.lightBlueAccent,
          onPressed: () => _addTask(_taskController.text),
        ),
      ],
    ),
  );
}

// UI for a single task card
Widget _buildTaskCard(Task task) {

```

```

return Card(
  margin: const EdgeInsets.symmetric(horizontal: 16, vertical: 6),
  elevation: 4,
  shape: RoundedRectangleBorder(borderRadius:
BorderRadius.circular(12)),
  child: ListTile(
    contentPadding: const EdgeInsets.symmetric(horizontal: 16,
vertical: 8),
    leading: Checkbox(
      value: task.isDone,
      onChanged: (value) => _toggleTaskStatus(task),
      activeColor: Colors.lightBlueAccent,
    ),
    title: Text(
      task.title,
      style: TextStyle(
        decoration:
          task.isDone ? TextDecoration.lineThrough :
TextDecoration.none,
        color: task.isDone ? Colors.white54 : Colors.white,
      ),
    ),
    trailing: Row(
      mainAxisAlignment: MainAxisAlignment.min,
      children: [
        IconButton(
          icon: const Icon(Icons.edit_note, color: Colors.greenAccent),
          onPressed: () => _showEditTaskDialog(task),
        ),
        IconButton(
          icon: const Icon(Icons.delete_forever, color:
Colors.redAccent),
          onPressed: () => _deleteTask(task.id),
        ),
      ],
    ),
  ),
);
}
}

```

Profile_screen.dart

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

class ProfileScreen extends StatefulWidget {
  const ProfileScreen({super.key});

  @override
  State<ProfileScreen> createState() => _ProfileScreenState();
}

class _ProfileScreenState extends State<ProfileScreen> {
  // A key to identify and validate our form
  final _formKey = GlobalKey<FormState>();

  // Controllers to manage the text in each field
  final _nameController = TextEditingController();
  final _emailController = TextEditingController();
  final _subjectController = TextEditingController();
  final _messageController = TextEditingController();

  // The admin's email address
  final String _adminEmail = 'admin@example.com';

  @override
  void dispose() {
    // Clean up the controllers when the widget is removed
    _nameController.dispose();
    _emailController.dispose();
    _subjectController.dispose();
    _messageController.dispose();
    super.dispose();
  }

  // --- Functionality ---

  void _clearForm() {
    _nameController.clear();
    _emailController.clear();
  }
}
```

```

    _subjectController.clear();
    _messageController.clear();
}

Future<void> _sendEmail() async {
    // Validate the form first
    if (_formKey.currentState!.validate()) {
        final Email email = Email(
            // The body of the email includes the user's details
            body: '''
                Message:
                ${_messageController.text}

                ---

                From: ${_nameController.text}
                Email: ${_emailController.text}
            ''',
            subject: _subjectController.text,
            recipients: [_adminEmail], // Send to the admin
            isHTML: false,
        );

        try {
            await FlutterEmailSender.send(email);
            ScaffoldMessenger.of(context).showSnackBar(
                const SnackBar(content: Text('Email client opened.')),
            );
        } catch (error) {
            ScaffoldMessenger.of(context).showSnackBar(
                SnackBar(content: Text('Could not open email client: $error')),
            );
        }
    }
}

// --- UI ---

@override
Widget build(BuildContext context) {
    return Scaffold(

```



```

appBar: AppBar(
  title: const Text('Contact Admin'),
  backgroundColor: Colors.transparent,
  elevation: 0,
),
extendBodyBehindAppBar: true,
body: Container(
  width: double.infinity,
  height: double.infinity,
  decoration: const BoxDecoration(
    gradient: LinearGradient(
      colors: [Color(0xFF0A192F), Color(0xFF172A46),
Color(0xFF304878)],
      begin: Alignment.topCenter,
      end: Alignment.bottomCenter,
    ),
  ),
  // Use a ListView to prevent overflow on small screens
  child: SingleChildScrollView(
    padding: const EdgeInsets.fromLTRB(16, 100, 16, 16),
    child: Column(
      children: [
        // Admin Details Card
        _buildAdminDetailsCard(),
        const SizedBox(height: 24),
        // User Details Form Card
        _buildUserDetailsForm(),
      ],
    ),
  ),
),
);
}

Widget _buildAdminDetailsCard() {
  return Card(
    elevation: 4,
    shape: RoundedRectangleBorder(borderRadius:
BorderRadius.circular(12)),
    child: const Padding(

```

```

padding: EdgeInsets.all(16.0),
child: Column(
  children: [
    ListTile(
      leading: Icon(Icons.shield_moon, color:
Colors.lightBlueAccent),
      title: Text('Admin Name'),
      subtitle: Text('Admin Office'),
    ),
    Divider(),
    ListTile(
      leading: Icon(Icons.email, color: Colors.lightBlueAccent),
      title: Text('Admin Email'),
      subtitle: Text('admin@example.com'),
    ),
  ],
),
);
}

Widget _buildUserDetailsForm() {
  return Card(
    elevation: 4,
    shape: RoundedRectangleBorder(borderRadius:
BorderRadius.circular(12)),
    child: Padding(
      padding: const EdgeInsets.all(16.0),
      child: Form(
        key: _formKey,
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.stretch,
          children: [
            const Text('Your Details',
              style: TextStyle(fontSize: 18, fontWeight:
FontWeight.bold)),
            const SizedBox(height: 16),
            TextFormField(
              controller: _nameController,
              decoration: const InputDecoration(labelText: 'Your Name'),

```

```

        validator: (v) => v!.isEmpty ? 'Please enter your name' :
null,
    ),
    const SizedBox(height: 12),
    TextFormField(
        controller: _emailController,
        decoration: const InputDecoration(labelText: 'Your Email'),
        keyboardType: TextInputType.emailAddress,
        validator: (v) => v!.isEmpty ? 'Please enter your email' :
null,
    ),
    const SizedBox(height: 12),
    TextFormField(
        controller: _subjectController,
        decoration: const InputDecoration(labelText: 'Subject'),
        validator: (v) => v!.isEmpty ? 'Please enter a subject' :
null,
    ),
    const SizedBox(height: 12),
    TextFormField(
        controller: _messageController,
        decoration: const InputDecoration(labelText: 'Message'),
        maxLines: 4,
        validator: (v) => v!.isEmpty ? 'Please enter a message' :
null,
    ),
    const SizedBox(height: 24),
    Row(
        mainAxisAlignment: MainAxisAlignment.end,
        children: [
            OutlinedButton(
                onPressed: _clearForm,
                child: const Text('Clear'),
            ),
            const SizedBox(width: 8),
            ElevatedButton.icon(
                onPressed: _sendEmail,
                icon: const Icon(Icons.send),
                label: const Text('Send'),
                style: ElevatedButton.styleFrom(

```

```

        backgroundColor: Colors.lightBlueAccent,
        foregroundColor: Colors.black,
      ),
    ),
  ],
),
],
),
),
),
);
}
}

```

weather _screen.dart

```

import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;
import 'dart:convert';
import 'package:intl/intl.dart'; // For date formatting

// A simple class to hold the data for a single day's forecast
class DailyForecast {
  final DateTime date;
  final String weatherCondition;
  final IconData weatherIcon;
  final double maxTemp;
  final double minTemp;

  DailyForecast({
    required this.date,
    required this.weatherCondition,
    required this.weatherIcon,
    required this.maxTemp,
    required this.minTemp,
  });
}

class WeatherScreen extends StatefulWidget {

```

```

const WeatherScreen({super.key});

@override
State<WeatherScreen> createState() => _WeatherScreenState();
}

class _WeatherScreenState extends State<WeatherScreen> {
  // A list to hold our 3-day forecast
  List<DailyForecast> _forecasts = [];
  bool _isLoading = true;
  String? _errorMessage;

  @override
  void initState() {
    super.initState();
    _fetchWeather();
  }

  // Fetches the 3-day forecast from the Open-Meteo API
  Future<void> _fetchWeather() async {
    // UPDATED: Requesting daily data for the next 3 days
    final url = Uri.parse(
      'https://api.open-meteo.com/v1/forecast?latitude=12.97&longitude=77.59&daily=weathercode,temperature_2m_max,temperature_2m_min&forecast_days=3');

    try {
      final response = await http.get(url);
      if (response.statusCode == 200) {
        final data = json.decode(response.body) ['daily'];

        // Clear previous forecast data
        final List<DailyForecast> fetchedForecasts = [];

        for (int i = 0; i < data['time'].length; i++) {
          final weatherCode = data['weathercode'][i];
          fetchedForecasts.add(
            DailyForecast(
              date: DateTime.parse(data['time'][i]),
              weatherCondition: _getWeatherCondition(weatherCode),
            )
          );
        }
      }
    } catch (e) {
      _errorMessage = e.toString();
    }
  }
}

```

```

        weatherIcon: _getWeatherIcon(weatherCode),
        maxTemp: data['temperature_2m_max'][i],
        minTemp: data['temperature_2m_min'][i],
    ),
);
}

setState(() {
    _forecasts = fetchedForecasts;
    _isLoading = false;
});
} else {
    throw Exception('Failed to load weather data');
}
} catch (e) {
    setState(() {
        _errorMessage = 'Could not fetch weather data.';
        _isLoading = false;
    });
}
}

// Helper functions to interpret the weather code from the API
String _getWeatherCondition(int code) {
    // (This function can be expanded for more detail)
    switch (code) {
        case 0:
            return 'Clear Sky';
        case 1:
        case 2:
        case 3:
            return 'Cloudy';
        case 45:
        case 48:
            return 'Fog';
        case 61:
        case 63:
        case 65:
            return 'Rain';
        case 80:

```

```

        case 81:
        case 82:
            return 'Showers';
        case 95:
        case 96:
        case 99:
            return 'Thunderstorm';
        default:
            return 'Cloudy';
    }
}

IconData _getWeatherIcon(int code) {
    switch (code) {
        case 0:
            return Icons.wb_sunny;
        case 1:
        case 2:
        case 3:
            return Icons.cloud;
        case 45:
        case 48:
            return Icons.foggy;
        case 61:
        case 63:
        case 65:
            return Icons.water_drop;
        case 80:
        case 81:
        case 82:
            return Icons.shower;
        case 95:
        case 96:
        case 99:
            return Icons.thunderstorm;
        default:
            return Icons.cloud_outlined;
    }
}

```

```

// Helper to get the day's name (Today, Tomorrow, or Weekday)
String _getDayName(DateTime date, int index) {
  if (index == 0) return 'Today';
  if (index == 1) return 'Tomorrow';
  return DateFormat('EEEE').format(date); // e.g., "Wednesday"
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: const Text('3-Day Forecast'),
    ),
    extendBodyBehindAppBar: true,
    body: Container(
      width: double.infinity,
      height: double.infinity,
      decoration: const BoxDecoration(
        gradient: LinearGradient(
          colors: [Color(0xFF0A192F), Color(0xFF172A46),
Color(0xFF304878)],
          begin: Alignment.topCenter,
          end: Alignment.bottomCenter,
        ),
      ),
      child: Center(
        child: _isLoading
          ? const CircularProgressIndicator()
          : _errorMessage != null
            ? Text(_errorMessage!,
              style: const TextStyle(color: Colors.red, fontSize:
16))
            : _buildForecastView(),
      ),
    ),
  );
}

// The main UI widget for displaying the 3-day forecast
Widget _buildForecastView() {

```



```

return Column(
  mainAxisAlignment: MainAxisAlignment.center,
  children: [
    const Text(
      'Bengaluru',
      style: TextStyle(
        fontSize: 32, fontWeight: FontWeight.w300, letterSpacing: 2),
    ),
    const SizedBox(height: 40),
    Row(
      mainAxisAlignment: MainAxisAlignment.spaceEvenly,
      children: List.generate(_forecasts.length, (index) {
        return _buildForecastCard(
          dayName: _getDayName(_forecasts[index].date, index),
          forecast: _forecasts[index],
        );
      })),
  ],
);
}

// A card widget for a single day's forecast
Widget _buildForecastCard(
  {required String dayName, required DailyForecast forecast}) {
  return Column(
    children: [
      Text(
        dayName,
        style: const TextStyle(fontSize: 18, fontWeight:
FontWeight.bold),
      ),
      const SizedBox(height: 12),
      Icon(forecast.weatherIcon, size: 44, color:
Colors.lightBlueAccent),
      const SizedBox(height: 12),
      Text(
        forecast.weatherCondition,
        style: const TextStyle(color: Colors.white70),
      ),
    ],
  );
}

```

```
const SizedBox(height: 20),
Text(
  '${forecast.maxTemp.round()}°',
  style: const TextStyle(fontSize: 26, fontWeight:
FontWeight.w600),
),
Text(
  '${forecast.minTemp.round()}°',
  style: const TextStyle(fontSize: 18, color: Colors.white54),
),
],
);
}
```