3.3 " Flutter Chat UI Tutorial"

* main.dart

import 'package:flutter/material.dart';  
import 'package:flutter\_chat\_ui/screens/home\_screen.dart';  
  
void main() => runApp(MyApp());  
  
class MyApp extends StatelessWidget {  
 // This widget is the root of your application.  
 @override  
 Widget build(BuildContext context) {  
 return MaterialApp(  
 title: 'Flutter Chat UI',  
 debugShowCheckedModeBanner: false,  
 theme: ThemeData(  
 primaryColor: Colors.*red*,  
 accentColor: Color(0xFFFEF9EB),  
 ),  
 home: HomeScreen(),  
 );  
 }  
}

**under ‘lib/models’ codes**

* message\_model.dart

import 'package:flutter\_chat\_ui/models/user\_model.dart';  
  
class Message {  
 final User sender;  
 final String  
 time; // Would usually be type DateTime or Firebase Timestamp in production apps  
 final String text;  
 final bool isLiked;  
 final bool unread;  
  
 Message({  
 this.sender,  
 this.time,  
 this.text,  
 this.isLiked,  
 this.unread,  
 });  
}  
  
// YOU - current user  
final User currentUser = User(  
 id: 0,  
 name: 'Current User',  
 imageUrl: 'assets/images/greg.jpg',  
);  
  
// USERS  
final User greg = User(  
 id: 1,  
 name: 'Greg',  
 imageUrl: 'assets/images/greg.jpg',  
);  
final User james = User(  
 id: 2,  
 name: 'James',  
 imageUrl: 'assets/images/james.jpg',  
);  
final User john = User(  
 id: 3,  
 name: 'John',  
 imageUrl: 'assets/images/john.jpg',  
);  
final User olivia = User(  
 id: 4,  
 name: 'Olivia',  
 imageUrl: 'assets/images/olivia.jpg',  
);  
final User sam = User(  
 id: 5,  
 name: 'Sam',  
 imageUrl: 'assets/images/sam.jpg',  
);  
final User sophia = User(  
 id: 6,  
 name: 'Sophia',  
 imageUrl: 'assets/images/sophia.jpg',  
);  
final User steven = User(  
 id: 7,  
 name: 'Steven',  
 imageUrl: 'assets/images/steven.jpg',  
);  
  
// FAVORITE CONTACTS  
List<User> favorites = [sam, steven, olivia, john, greg];  
  
// EXAMPLE CHATS ON HOME SCREEN  
List<Message> chats = [  
 Message(  
 sender: james,  
 time: '5:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: olivia,  
 time: '4:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: john,  
 time: '3:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: false,  
 ),  
 Message(  
 sender: sophia,  
 time: '2:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: steven,  
 time: '1:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: false,  
 ),  
 Message(  
 sender: sam,  
 time: '12:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: false,  
 ),  
 Message(  
 sender: greg,  
 time: '11:30 AM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: false,  
 unread: false,  
 ),  
];  
  
// EXAMPLE MESSAGES IN CHAT SCREEN  
List<Message> messages = [  
 Message(  
 sender: james,  
 time: '5:30 PM',  
 text: 'Hey, how\'s it going? What did you do today?',  
 isLiked: true,  
 unread: true,  
 ),  
 Message(  
 sender: currentUser,  
 time: '4:30 PM',  
 text: 'Just walked my doge. She was super duper cute. The best pupper!!',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: james,  
 time: '3:45 PM',  
 text: 'How\'s the doggo?',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: james,  
 time: '3:15 PM',  
 text: 'All the food',  
 isLiked: true,  
 unread: true,  
 ),  
 Message(  
 sender: currentUser,  
 time: '2:30 PM',  
 text: 'Nice! What kind of food did you eat?',  
 isLiked: false,  
 unread: true,  
 ),  
 Message(  
 sender: james,  
 time: '2:00 PM',  
 text: 'I ate so much food today.',  
 isLiked: false,  
 unread: true,  
 ),  
];

* user\_model.dart

class User {  
 final int id;  
 final String name;  
 final String imageUrl;  
  
 User({  
 this.id,  
 this.name,  
 this.imageUrl,  
 });  
}

**under ‘lib/screens’ codes**

* chat\_screens.dart

import 'package:flutter/material.dart';  
import 'package:flutter\_chat\_ui/models/message\_model.dart';  
import 'package:flutter\_chat\_ui/models/user\_model.dart';  
  
class ChatScreen extends StatefulWidget {  
 final User user;  
  
 ChatScreen({this.user});  
  
 @override  
 \_ChatScreenState createState() => \_ChatScreenState();  
}  
  
class \_ChatScreenState extends State<ChatScreen> {  
 \_buildMessage(Message message, bool isMe) {  
 final Container msg = Container(  
 margin: isMe  
 ? EdgeInsets.only(  
 top: 8.0,  
 bottom: 8.0,  
 left: 80.0,  
 )  
 : EdgeInsets.only(  
 top: 8.0,  
 bottom: 8.0,  
 ),  
 padding: EdgeInsets.symmetric(horizontal: 25.0, vertical: 15.0),  
 width: MediaQuery.*of*(context).size.width \* 0.75,  
 decoration: BoxDecoration(  
 color: isMe ? Theme.*of*(context).accentColor : Color(0xFFFFEFEE),  
 borderRadius: isMe  
 ? BorderRadius.only(  
 topLeft: Radius.circular(15.0),  
 bottomLeft: Radius.circular(15.0),  
 )  
 : BorderRadius.only(  
 topRight: Radius.circular(15.0),  
 bottomRight: Radius.circular(15.0),  
 ),  
 ),  
 child: Column(  
 crossAxisAlignment: CrossAxisAlignment.start,  
 children: <Widget>[  
 Text(  
 message.time,  
 style: TextStyle(  
 color: Colors.*blueGrey*,  
 fontSize: 16.0,  
 fontWeight: FontWeight.*w600*,  
 ),  
 ),  
 SizedBox(height: 8.0),  
 Text(  
 message.text,  
 style: TextStyle(  
 color: Colors.*blueGrey*,  
 fontSize: 16.0,  
 fontWeight: FontWeight.*w600*,  
 ),  
 ),  
 ],  
 ),  
 );  
 if (isMe) {  
 return msg;  
 }  
 return Row(  
 children: <Widget>[  
 msg,  
 IconButton(  
 icon: message.isLiked  
 ? Icon(Icons.*favorite*)  
 : Icon(Icons.*favorite\_border*),  
 iconSize: 30.0,  
 color: message.isLiked  
 ? Theme.*of*(context).primaryColor  
 : Colors.*blueGrey*,  
 onPressed: () {},  
 )  
 ],  
 );  
 }  
  
 \_buildMessageComposer() {  
 return Container(  
 padding: EdgeInsets.symmetric(horizontal: 8.0),  
 height: 70.0,  
 color: Colors.*white*,  
 child: Row(  
 children: <Widget>[  
 IconButton(  
 icon: Icon(Icons.*photo*),  
 iconSize: 25.0,  
 color: Theme.*of*(context).primaryColor,  
 onPressed: () {},  
 ),  
 Expanded(  
 child: TextField(  
 textCapitalization: TextCapitalization.sentences,  
 onChanged: (value) {},  
 decoration: InputDecoration.collapsed(  
 hintText: 'Send a message...',  
 ),  
 ),  
 ),  
 IconButton(  
 icon: Icon(Icons.*send*),  
 iconSize: 25.0,  
 color: Theme.*of*(context).primaryColor,  
 onPressed: () {},  
 ),  
 ],  
 ),  
 );  
 }  
  
 @override  
 Widget build(BuildContext context) {  
 return Scaffold(  
 backgroundColor: Theme.*of*(context).primaryColor,  
 appBar: AppBar(  
 title: Text(  
 widget.user.name,  
 style: TextStyle(  
 fontSize: 28.0,  
 fontWeight: FontWeight.*bold*,  
 ),  
 ),  
 elevation: 0.0,  
 actions: <Widget>[  
 IconButton(  
 icon: Icon(Icons.*more\_horiz*),  
 iconSize: 30.0,  
 color: Colors.*white*,  
 onPressed: () {},  
 ),  
 ],  
 ),  
 body: GestureDetector(  
 onTap: () => FocusScope.*of*(context).unfocus(),  
 child: Column(  
 children: <Widget>[  
 Expanded(  
 child: Container(  
 decoration: BoxDecoration(  
 color: Colors.*white*,  
 borderRadius: BorderRadius.only(  
 topLeft: Radius.circular(30.0),  
 topRight: Radius.circular(30.0),  
 ),  
 ),  
 child: ClipRRect(  
 borderRadius: BorderRadius.only(  
 topLeft: Radius.circular(30.0),  
 topRight: Radius.circular(30.0),  
 ),  
 child: ListView.builder(  
 reverse: true,  
 padding: EdgeInsets.only(top: 15.0),  
 itemCount: messages.length,  
 itemBuilder: (BuildContext context, int index) {  
 final Message message = messages[index];  
 final bool isMe = message.sender.id == currentUser.id;  
 return \_buildMessage(message, isMe);  
 },  
 ),  
 ),  
 ),  
 ),  
 \_buildMessageComposer(),  
 ],  
 ),  
 ),  
 );  
 }  
}

* home\_screen.dart

import 'package:flutter/material.dart';  
import 'package:flutter\_chat\_ui/widgets/category\_selector.dart';  
import 'package:flutter\_chat\_ui/widgets/favorite\_contacts.dart';  
import 'package:flutter\_chat\_ui/widgets/recent\_chats.dart';  
  
class HomeScreen extends StatefulWidget {  
 @override  
 \_HomeScreenState createState() => \_HomeScreenState();  
}  
  
class \_HomeScreenState extends State<HomeScreen> {  
 @override  
 Widget build(BuildContext context) {  
 return Scaffold(  
 backgroundColor: Theme.*of*(context).primaryColor,  
 appBar: AppBar(  
 leading: IconButton(  
 icon: Icon(Icons.*menu*),  
 iconSize: 30.0,  
 color: Colors.*white*,  
 onPressed: () {},  
 ),  
 title: Text(  
 'Chats',  
 style: TextStyle(  
 fontSize: 28.0,  
 fontWeight: FontWeight.*bold*,  
 ),  
 ),  
 elevation: 0.0,  
 actions: <Widget>[  
 IconButton(  
 icon: Icon(Icons.*search*),  
 iconSize: 30.0,  
 color: Colors.*white*,  
 onPressed: () {},  
 ),  
 ],  
 ),  
 body: Column(  
 children: <Widget>[  
 CategorySelector(),  
 Expanded(  
 child: Container(  
 decoration: BoxDecoration(  
 color: Theme.*of*(context).accentColor,  
 borderRadius: BorderRadius.only(  
 topLeft: Radius.circular(30.0),  
 topRight: Radius.circular(30.0),  
 ),  
 ),  
 child: Column(  
 children: <Widget>[  
 FavoriteContacts(),  
 RecentChats(),  
 ],  
 ),  
 ),  
 ),  
 ],  
 ),  
 );  
 }  
}

**under ‘lib/widgets’ codes**

* category\_selector.dart

import 'package:flutter/material.dart';  
  
class CategorySelector extends StatefulWidget {  
 @override  
 \_CategorySelectorState createState() => \_CategorySelectorState();  
}  
  
class \_CategorySelectorState extends State<CategorySelector> {  
 int selectedIndex = 0;  
 final List<String> categories = ['Messages', 'Online', 'Groups', 'Requests'];  
  
 @override  
 Widget build(BuildContext context) {  
 return Container(  
 height: 90.0,  
 color: Theme.*of*(context).primaryColor,  
 child: ListView.builder(  
 scrollDirection: Axis.horizontal,  
 itemCount: categories.length,  
 itemBuilder: (BuildContext context, int index) {  
 return GestureDetector(  
 onTap: () {  
 setState(() {  
 selectedIndex = index;  
 });  
 },  
 child: Padding(  
 padding: EdgeInsets.symmetric(  
 horizontal: 20.0,  
 vertical: 30.0,  
 ),  
 child: Text(  
 categories[index],  
 style: TextStyle(  
 color: index == selectedIndex ? Colors.*white* : Colors.*white60*,  
 fontSize: 24.0,  
 fontWeight: FontWeight.*bold*,  
 letterSpacing: 1.2,  
 ),  
 ),  
 ),  
 );  
 },  
 ),  
 );  
 }  
}

* favorite\_contacts.dart

import 'package:flutter/material.dart';  
import 'package:flutter\_chat\_ui/models/message\_model.dart';  
import 'package:flutter\_chat\_ui/screens/chat\_screen.dart';  
  
class FavoriteContacts extends StatelessWidget {  
 @override  
 Widget build(BuildContext context) {  
 return Padding(  
 padding: EdgeInsets.symmetric(vertical: 10.0),  
 child: Column(  
 children: <Widget>[  
 Padding(  
 padding: EdgeInsets.symmetric(horizontal: 20.0),  
 child: Row(  
 mainAxisAlignment: MainAxisAlignment.spaceBetween,  
 children: <Widget>[  
 Text(  
 'Favorite Contacts',  
 style: TextStyle(  
 color: Colors.*blueGrey*,  
 fontSize: 18.0,  
 fontWeight: FontWeight.*bold*,  
 letterSpacing: 1.0,  
 ),  
 ),  
 IconButton(  
 icon: Icon(  
 Icons.*more\_horiz*,  
 ),  
 iconSize: 30.0,  
 color: Colors.*blueGrey*,  
 onPressed: () {},  
 ),  
 ],  
 ),  
 ),  
 Container(  
 height: 120.0,  
 child: ListView.builder(  
 padding: EdgeInsets.only(left: 10.0),  
 scrollDirection: Axis.horizontal,  
 itemCount: favorites.length,  
 itemBuilder: (BuildContext context, int index) {  
 return GestureDetector(  
 onTap: () => Navigator.*push*(  
 context,  
 MaterialPageRoute(  
 builder: (\_) => ChatScreen(  
 user: favorites[index],  
 ),  
 ),  
 ),  
 child: Padding(  
 padding: EdgeInsets.all(10.0),  
 child: Column(  
 children: <Widget>[  
 CircleAvatar(  
 radius: 35.0,  
 backgroundImage:  
 AssetImage(favorites[index].imageUrl),  
 ),  
 SizedBox(height: 6.0),  
 Text(  
 favorites[index].name,  
 style: TextStyle(  
 color: Colors.*blueGrey*,  
 fontSize: 16.0,  
 fontWeight: FontWeight.*w600*,  
 ),  
 ),  
 ],  
 ),  
 ),  
 );  
 },  
 ),  
 ),  
 ],  
 ),  
 );  
 }  
}

* recent\_chats.dart

import 'package:flutter/material.dart';  
import 'package:flutter\_chat\_ui/models/message\_model.dart';  
import 'package:flutter\_chat\_ui/screens/chat\_screen.dart';  
  
class RecentChats extends StatelessWidget {  
 @override  
 Widget build(BuildContext context) {  
 return Expanded(  
 child: Container(  
 decoration: BoxDecoration(  
 color: Colors.*white*,  
 borderRadius: BorderRadius.only(  
 topLeft: Radius.circular(30.0),  
 topRight: Radius.circular(30.0),  
 ),  
 ),  
 child: ClipRRect(  
 borderRadius: BorderRadius.only(  
 topLeft: Radius.circular(30.0),  
 topRight: Radius.circular(30.0),  
 ),  
 child: ListView.builder(  
 itemCount: chats.length,  
 itemBuilder: (BuildContext context, int index) {  
 final Message chat = chats[index];  
 return GestureDetector(  
 onTap: () => Navigator.*push*(  
 context,  
 MaterialPageRoute(  
 builder: (\_) => ChatScreen(  
 user: chat.sender,  
 ),  
 ),  
 ),  
 child: Container(  
 margin: EdgeInsets.only(top: 5.0, bottom: 5.0, right: 20.0),  
 padding:  
 EdgeInsets.symmetric(horizontal: 20.0, vertical: 10.0),  
 decoration: BoxDecoration(  
 color: chat.unread ? Color(0xFFFFEFEE) : Colors.*white*,  
 borderRadius: BorderRadius.only(  
 topRight: Radius.circular(20.0),  
 bottomRight: Radius.circular(20.0),  
 ),  
 ),  
 child: Row(  
 mainAxisAlignment: MainAxisAlignment.spaceBetween,  
 children: <Widget>[  
 Row(  
 children: <Widget>[  
 CircleAvatar(  
 radius: 35.0,  
 backgroundImage: AssetImage(chat.sender.imageUrl),  
 ),  
 SizedBox(width: 10.0),  
 Column(  
 crossAxisAlignment: CrossAxisAlignment.start,  
 children: <Widget>[  
 Text(  
 chat.sender.name,  
 style: TextStyle(  
 color: Colors.*grey*,  
 fontSize: 15.0,  
 fontWeight: FontWeight.*bold*,  
 ),  
 ),  
 SizedBox(height: 5.0),  
 Container(  
 width: MediaQuery.*of*(context).size.width \* 0.45,  
 child: Text(  
 chat.text,  
 style: TextStyle(  
 color: Colors.*blueGrey*,  
 fontSize: 15.0,  
 fontWeight: FontWeight.*w600*,  
 ),  
 overflow: TextOverflow.ellipsis,  
 ),  
 ),  
 ],  
 ),  
 ],  
 ),  
 Column(  
 children: <Widget>[  
 Text(  
 chat.time,  
 style: TextStyle(  
 color: Colors.*grey*,  
 fontSize: 15.0,  
 fontWeight: FontWeight.*bold*,  
 ),  
 ),  
 SizedBox(height: 5.0),  
 chat.unread  
 ? Container(  
 width: 40.0,  
 height: 20.0,  
 decoration: BoxDecoration(  
 color: Theme.*of*(context).primaryColor,  
 borderRadius: BorderRadius.circular(30.0),  
 ),  
 alignment: Alignment.*center*,  
 child: Text(  
 'NEW',  
 style: TextStyle(  
 color: Colors.*white*,  
 fontSize: 12.0,  
 fontWeight: FontWeight.*bold*,  
 ),  
 ),  
 )  
 : Text(''),  
 ],  
 ),  
 ],  
 ),  
 ),  
 );  
 },  
 ),  
 ),  
 ),  
 );  
 }  
}