

6A Laying out a scene

MaterialApp

Our entire app is wrapped in a MaterialApp. Let's study it a moment.

1. Edit main.dart. Notice the MaterialApp at the root.
2. Notice how it has a title, a theme, and routes. If the title isn't already "Dinner and a Movie", make it so.
3. Bonus! If you want to remove the debug banner in the upper-right, put this in your MaterialApp:
`debugShowCheckedModeBanner: false,`

Scaffold

Each of the scene-level widgets should have a Scaffold.

4. Run your app. Notice that some of the scenes have a Scaffold. Landing and Checkout are fine but the rest need some help.
5. Add a Scaffold to FilmDetails.
6. Run and test and you'll see that the big ugly, red and yellow words are now a less-annoying size and color.
7. Add a Scaffold to PickSeat.
8. While you're there, Move its FAB to the Scaffold so it'll be placed properly. Feel free to put in an icon that makes sense.
9. Add a Scaffold to Ticket.

AppBar

We've got Scaffolds, but no AppBar.

10. Add an AppBar to FilmDetails.
11. Add an AppBar to PickSeats.
12. Add an AppBar to Tickets.
13. Run and test your app. Notice that now you have a back button in the upper-left of each scene so you can navigate back in history.

That's all that's required but if you need more of a challenge here's a couple of bonus challenges.

Bonus! SafeArea

14. Run your app in a device with a notch. Notice that part of the app is occulted by the notch and rounded corners.

15. Wrap your MaterialApp widget in a SafeArea widget.
16. Run it again, noticing that the notch and rounded corners are avoided.

Bonus! SnackBar

17. Edit Checkout. Find where you're POSTing the purchase to the server.
18. Uh-oh, what happens if the purchase isn't successful? How are you handling it?
19. Handle the situation where the server sends back a 400- or 500-series error and bring up a SnackBar with an error message asking the user to try again. See if you can write it yourself, but here's a possible solution if you get stuck:

```
post(uri, body: purchaseJson, headers: headers).then((res) {  
  var ticketNumbers = (json.decode(res.body) as List).cast<int>();  
  rawState.set("ticketNumbers", ticketNumbers);  
  Navigator.pushNamed(context, "/ticket");  
}).catchError((e) {  
  const SnackBar sb = SnackBar(  
    content: Text("Purchase failed. Try again."),  
    duration: Duration(seconds: 5),  
  );  
  ScaffoldMessenger.of(context).showSnackBar(sb);  
});
```