



Desenvolvimento
Mobile 2
Aula 03

Prof. Me Daniel Vieira

SENAI

Agenda

- 1- App múltiplas telas
- 2 - Stateless x Statefull
- 3-Exemplo
- 4 - Exercícios

App múltiplas telas

The screenshot shows a Flutter project setup in a code editor and an attached Android emulator.

Code Editor (VS Code):

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Editor:** The main.dart file is open, showing the following code:

```
lib > main.dart > main
1 import 'package:app_prep01/Telasecundaria.dart';
2 import 'package:flutter/material.dart';
3
4 void main() {
5   runApp(MaterialApp(
6     home: TelaPrincipal(),
7   )); // MaterialApp
8 }
9
10 class TelaPrincipal extends StatefulWidget {
11   const TelaPrincipal({super.key});
12
13   @override
14   State<TelaPrincipal> createState() => _TelaPrincipalState();
15 }
16
17 class _TelaPrincipalState extends State<TelaPrincipal> {
18   @override
19   Widget build(BuildContext context) {
20     return Scaffold(
21       appBar: AppBar(
22         title: Text("Tela 1"),
23         backgroundColor: Colors.blue,
24       ), // AppBar
25       body: Column(
```

Terminal:

```
Launching lib/main.dart on AOSP on IA Emulator in debug mode...
Formato de parâmetros incorreto -
V Built build\app\outputs\flutter-apk\app-debug.apk.
Connecting to VM Service at ws://127.0.0.1:62309/io.fluxIxhp0-/ws
D/EGLCodecCommon( 9701): setVertexAttribArrayObject: set vao to 0 (0) 0 0
D/EGL_emulation( 9701): egIMakeCurrent: 0xe4385cc0: ver 2 0 (tinfo 0xcd958dd0)
```

Emulator:

- Title Bar:** Android Emulator - flutter_emulator:5554
- Time:** 5:44
- Content:** Shows "Tela 1" with a blue background and white text. A blue button labeled "Tela 2" is visible.
- Control Panel:** Includes icons for power, volume, brightness, and other device controls.

Bottom Status Bar: Shows battery level (100%), signal strength (2 bars), and a "Debug my code + SDK" button.

App múltiplas telas

The screenshot shows a Flutter development setup with two main components: an IDE interface and an Android emulator.

IDE Interface:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Project Structure:** lib > main.dart > main.
- Code Editor:** The main.dart file is open, displaying the following Dart code:

```
lib > main.dart > main
21 appBar: AppBar(
22   title: Text("Tela 1"),
23   backgroundColor: Colors.blue,
24 ), // AppBar
25 body: Column(
26   mainAxisAlignment: MainAxisAlignment.center,
27   crossAxisAlignment: CrossAxisAlignment.center,
28   children: [
29     Center(
30       child: Text(
31         "Tela principal",
32         style: TextStyle(fontSize: 25),
33       ), // Text
34     ), // Center
35     ElevatedButton(
36       onPressed: () {
37         Navigator.push(
38           context,
39           MaterialPageRoute(
40             builder: (context) => TelaSecundaria()),
41             // route,
42             // Widget que permite navegação entre telas
43           ),
44         child: Text("Tela 2"),
45       ],
46     ); // Column // Scaffold
); // Column // Scaffold
```

Terminal: Shows the command being run: `Launching lib/main.dart on AOSP on IA Emulator in debug mode...`

Output: Displays log messages from the build process, including:

- `V Built app outputs\flutter-apk\app-debug.apk.`
- `Connecting to VM Service at ws://127.0.0.1:62389/io0HuxIxhp0~ws`
- `D/eGlCodecCommon(9701): setVertexAttribObject: set vao to 0 (0) 0 0`
- `D/EGL_emulation(9701): eglMakeCurrent: 0xe4385cc0: ver 2 0 (tinfo 0xcd958dd0)`

Android Emulator: The emulator window shows the first screen titled "Tela 1". The screen content is "Tela principal". A blue button labeled "Tela 2" is visible. The top status bar shows the time as 5:46 and battery level. The bottom navigation bar has three icons.

Bottom Status Bar: Shows the current file as `main.dart`, line 6, column 27, and other system information like network and battery status.

App múltiplas telas - Tela secundária

The screenshot shows a development environment for a Flutter application. On the left, the code editor displays `Telasecundaria.dart` with the following content:

```
lib > Telasecundaria.dart > ...
1 import 'Telaoopcoes.dart';
2 import 'package:flutter/material.dart';
3
4 class TelaSecundaria extends StatefulWidget {
5   const TelaSecundaria({super.key});
6
7   @override
8   State<TelaSecundaria> createState() => _TelaSecundariaState();
9 }
10
11 class _TelaSecundariaState extends State<TelaSecundaria> {
12   @override
13   Widget build(BuildContext context) {
14     return Scaffold(
15       appBar: AppBar(
16         title: Text("Tela 2"),
17         backgroundColor: Colors.orange,
18       ), // AppBar
19       body: Column(
20         mainAxisAlignment: MainAxisAlignment.center,
21         crossAxisAlignment: CrossAxisAlignment.center,
22         children: [
23           Center(
24             child: Text(
25               "Tela secundaria",
26               style: TextStyle(fontSize: 25),
27             ),
28           ),
29         ],
30       ),
31     );
32   }
33 }
```

The bottom of the code editor shows the output of the build process:

```
Launching lib/main.dart on AOSP on IA Emulator in debug mode...
Formato de parâmetros incorreto -
V Built build\app\outputs\flutter-apk\app-debug.apk.
Connecting to VM Service at ws://127.0.0.1:62389/loHuxIxhp0=/ws
D/eeglcodecCommon( 9701): setVertexAttribArrayObject: set vao to 0 (0) 0 0
D/EGL_emulation( 9701): eglGetCurrent: 0xe4385cc0: ver 2 0 (tinfo 0xcd958dd0)
```

On the right, the Android Emulator window titled "Android Emulator - flutter_emulator5554" displays the second screen of the application. The title bar says "Tela 2". The main content area contains the text "Tela secundaria" and a "Opções" button. The status bar indicates "5:47" and "DEBUG". The bottom of the emulator shows standard Android navigation icons.

App múltiplas telas - Tela secundária

The screenshot shows a Flutter development setup with two main components: a code editor and a running emulator.

Code Editor: On the left, the code editor displays the file `Telasecundaria.dart`. The code defines a `Scaffold` with a `Column` as its body. Inside the `Column`, there is a `Text` widget with the text "Tela secundaria" and a `ElevatedButton` labeled "Opções".

```
25     "Tela secundaria",
26     style: TextStyle(fontSize: 25),
27   ), // Text
28   ), // Center
29   Padding(
30     padding: const EdgeInsets.all(15.0),
31     child: Text("Desenvolvimento Mobile",
32     style: TextStyle(fontSize: 25)), // Text
33   ), // Padding
34   ElevatedButton(
35     onPressed: () {
36       Navigator.push(
37         context,
38         MaterialPageRoute(builder: (context) => Telaopcoes()),
39       );
40     },
41     child: Text("Opções"),
42     style: ElevatedButton.styleFrom(
43       primary: Colors.orange,
44     ),
45   ), // ElevatedButton
46 ],
47 ); // Column // Scaffold
48 }
49 }
```

Emulator: On the right, the Android Emulator displays "Tela 2" with the following content:

Tela secundaria
Desenvolvimento Mobile
Opções

The bottom status bar of the emulator shows "main.dart:1".

Bottom Status Bar: At the very bottom, the status bar indicates "Ln 50 Col 1 Spaces: 2 UTF-8 CRLF { Dart flutter emulator (android-x86 emulator) } Prettier".

App múltiplas telas - Tela opções

The screenshot shows a Flutter project setup in an IDE. On the left, the code editor displays `main.dart`, `Telaopcoes.dart`, and `Telasecundaria.dart`. The `Telaopcoes.dart` file contains the code for the 'Tela opções' screen, which is currently running in the Android Emulator. The emulator window shows a green header with the title 'Tela opções'. The main body of the screen displays the text 'Tela 3' and 'Senai Roberto Mange' above a large green square. The right side of the interface includes a vertical toolbar with various icons for device control and a log viewer.

```
File Edit Selection View Go Run Terminal Help ← → ⌂ app_prep01
lib > Telaopcoes.dart > ...
1 import 'package:flutter/material.dart';
2
3 class Telaopcoes extends StatefulWidget {
4   const Telaopcoes({super.key});
5
6   @override
7   State<Telaopcoes> createState() => _TelaopcoesState();
8 }
9
10 class _TelaopcoesState extends State<Telaopcoes> {
11   @override
12   Widget build(BuildContext context) {
13     return Scaffold(
14       appBar: AppBar(
15         title: Text("Tela opções"),
16         backgroundColor: Colors.green,
17       ), // AppBar
18       body: Column(
19         mainAxisAlignment: MainAxisAlignment.center,
20         crossAxisAlignment: CrossAxisAlignment.center,
21         children: [
22           Center(
23             child: Text(
24               "Tela 3",
25               style: TextStyle(fontSize: 25),
26             ), // Text

```

PROBLEMS OUTPUT TERMINAL PORTS SERIAL MONITOR DEBUG CONSOLE

Launching lib/main.dart on AOSP on IA Emulator in debug mode...

Formato de parâmetros incorreto -

✓ Built build/app/outputs/flutter-apk/app-debug.apk.

Connecting to VM Service at ws://127.0.0.1:62389/io0MuxIxhp0=ws

D/EGLCodeCommon(9701): setVertexAttribArrayObject: set vao to 0 (0) 0 0

D/EGL_emulation(9701): eglGetCurrent: 0xe4385cc0: ver 2 0 (tinfo 0xcd958dd0)

Ln 1, Col 40 Spaces: 2 UTR-8 ⓘ Dart flutter emulator (android-x86 emulator) ⓘ Prettier ⓘ

App múltiplas telas - Tela opções

The screenshot shows a Flutter development setup with the following components:

- Code Editor:** An IDE window displaying the file `Telaopcoes.dart`. The code defines a `Scaffold` with a `Column` containing a `Text` widget for "Tela 3" and another `Text` widget for "Senai Roberto Mange".
- Terminal:** A terminal window at the bottom left showing the command `flutter run` being executed, along with logs indicating the app is launching on an Android emulator.
- Emulator:** An Android emulator window titled "Android Emulator - flutter_emulator:5554" showing the application's interface. The title bar says "Tela opções". The main screen displays the text "Tela 3" and "Senai Roberto Mange" above a large green square.
- Side Panel:** A vertical panel on the right side of the emulator window containing various control icons for the emulator, such as power, volume, and camera.

Exercícios

- 1) Você foi contratado pela empresa SM Mobile para que exiba frases do dia em 5 telas diferentes . A Mudança de tela é realizada através de botões no aplicativo. As frases fica a critério de cada um.
- 2) Criar um aplicativo com 2 telas onde a primeira tela é de boas vindas e a segunda tela com os itens a serem comprados.
- 3) Criar um aplicativo com 3 telas para 3 esportes basquete, futebol e NFL com os jogadores e estatísticas de cada um.
- 4) Criar um aplicativo para receber o nome do aluno, as notas de 4 disciplinas para calcular a média da nota de 3 avaliações por aluno e exibir se o aluno foi aprovado ou não na disciplina e exibir sua média. Cada disciplina deve ter uma tela correspondente.

Exercícios

Subir o código no Git Hub e postar o link nesse forms

https://docs.google.com/forms/d/1HKOkuQtvCTx9gyS86qtNmXCthGn59WUOLgr5eH_UzN4/edit

Obrigado!

Prof. Me Daniel Vieira

Email: danielvieira2006@gmail.com

Linkedin: Daniel Vieira

Instagram: Prof daniel.vieira95

