



Flutter

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Prática 21

BottomNavigationBar (continuação)

Documentação: <https://api.flutter.dev/flutter/material/BottomNavigationBar-class.html>

Objetivo: exemplificar o uso do widget BottomNavigationBar.

O widget BottomNavigationBar é exibido na parte inferior de um aplicativo. Ele permite selecionar um pequeno número de páginas, rotas (normalmente entre três e cinco).

O widget BottomNavigationBar apresenta itens na forma de rótulos de texto, ícones ou ambos. Geralmente, é usado em conjunto com um widget Scaffold, em que é passado como argumento do atributo Scaffold.bottomNavigationBar.

Nesta prática, você vai:

- a) Criar um BottomNavigationBar.

1) Crie um novo projeto Flutter, usando:

- a. Visual Studio Code, ou;
- b. <https://dartpad.dev/>, ou;
- c. <https://flutlab.io/ide>, ou;
- d. <https://flutterstudio.app/>, ou;
- e. <https://codemagic.io/>.

Transição de Telas

- 2) O exemplo abaixo cria um aplicativo que permite realizar uma transição de telas através de um widget BottomNavigationBar. O exemplo mostra como um widget BottomNavigationBar é usado em um widget Scaffold. O widget BottomNavigationBar tem dois widgets BottomNavigationBarItem. O inteiro “índice” é usado para indicar o BottomNavigationBarItem selecionado pelo usuário. Ele é iniciado com o valor 0, indicando a primeira página (rota) do aplicativo. No atributo “onTap”, o índice é

atualizado através do método “aoPressionar ()”. O método “aoPressionar ()” é o responsável pela chamada de “setState ()”.

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

main() => runApp(
  MaterialApp(
    home: Inicio(),
    debugShowCheckedModeBanner: false,
  ),
);

class Inicio extends StatefulWidget {
  @override
  InicioState createState() => InicioState();
}

class InicioState extends State<Inicio> {
  int indice = 0;

  final List<Widget> rotas = [
    PrimeiraRota(),
    SegundaRota(),
  ];

  void aoPressionar(int indiceRotaSelecionada) {
    setState(
      () {
        this.indice = indiceRotaSelecionada;
      },
    );
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: rotas[this.indice],
      bottomNavigationBar: BottomNavigationBar(
        currentIndex: this.indice,
        items: [
          BottomNavigationBarItem(
            icon: Icon(Icons.home),
            label: 'Primeira Rota',
          ),
          BottomNavigationBarItem(
            icon: Icon(Icons.assessment),
```

```
        label: 'Segunda Rota',
      ),
    ],
    onTap: (int indiceDaRotaEscolhida) {
      aoPressionar(indiceDaRotaEscolhida);
    },
  ),
);
}
}

class PrimeiraRota extends StatefulWidget {
  @override
  PrimeiraRotaState createState() => PrimeiraRotaState();
}

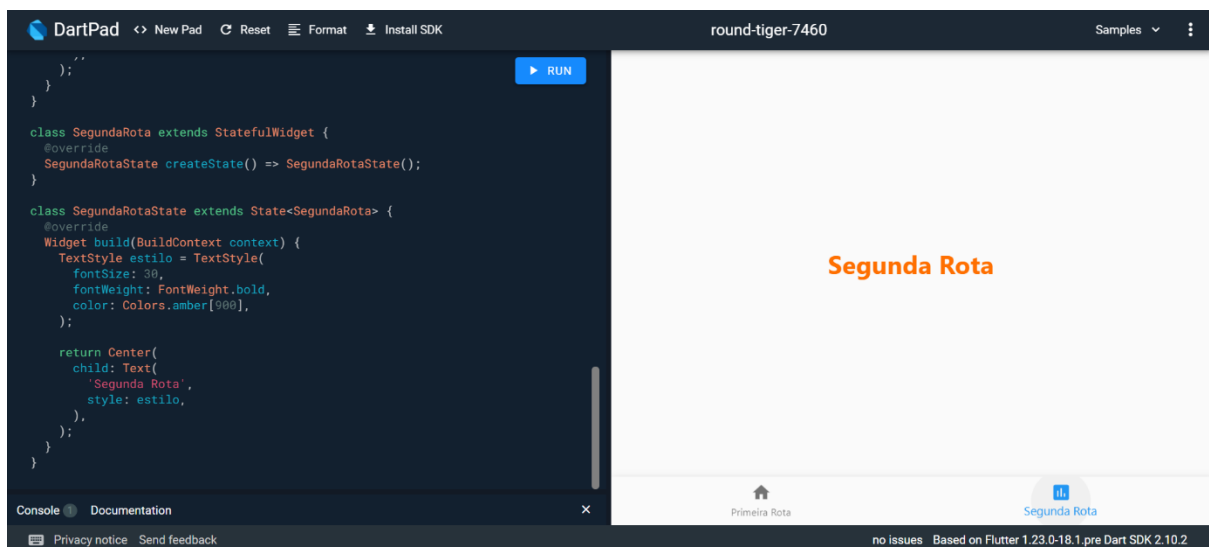
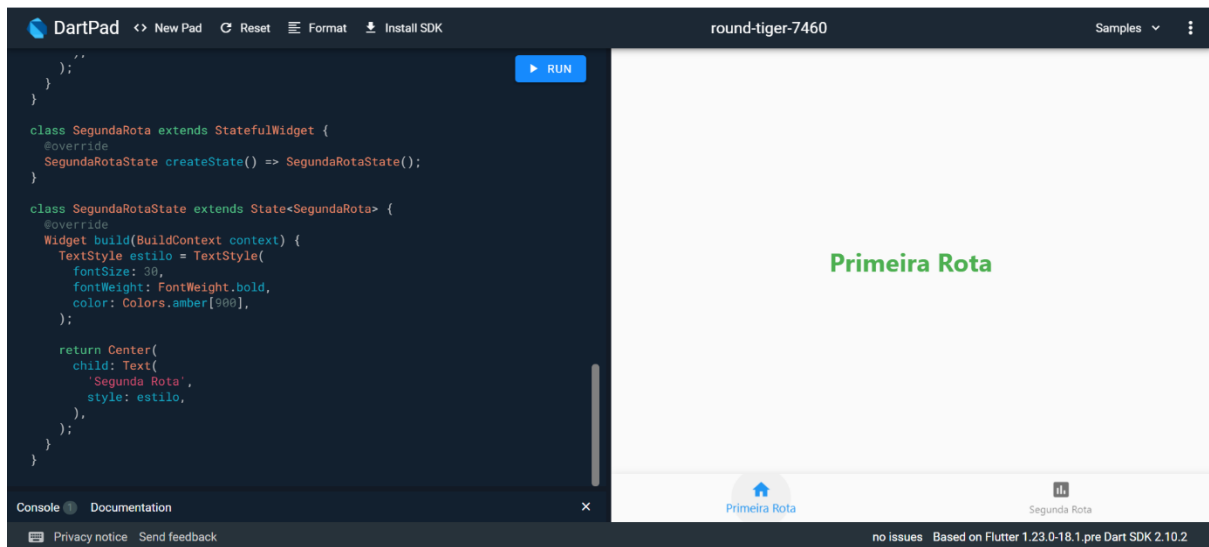
class PrimeiraRotaState extends State<PrimeiraRota> {
  @override
  Widget build(BuildContext context) {
    TextStyle estilo = TextStyle(
      fontSize: 30,
      fontWeight: FontWeight.bold,
      color: Colors.green,
    );

    return Center(
      child: Text(
        'Primeira Rota',
        style: estilo,
      ),
    );
  }
}

class SegundaRota extends StatefulWidget {
  @override
  SegundaRotaState createState() => SegundaRotaState();
}

class SegundaRotaState extends State<SegundaRota> {
  @override
  Widget build(BuildContext context) {
    TextStyle estilo = TextStyle(
      fontSize: 30,
      fontWeight: FontWeight.bold,
      color: Colors.amber[900],
    );
  }
}
```

```
return Center(  
  child: Text(  
    'Segunda Rota',  
    style: estilo,  
  ),  
);  
}
```



Exercício

1) Analise o algoritmo abaixo.

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

main() => runApp(
  MaterialApp(
    home: Inicio(),
    debugShowCheckedModeBanner: false,
  ),
);

class Inicio extends StatefulWidget {
  @override
  InicioState createState() => InicioState();
}

class InicioState extends State<Inicio> {
  int indice = 0;

  final List<Widget> rotas = [
    PrimeiraRota(),
    SegundaRota(),
  ];

  void aoPressionar(int indiceRotaSelecionada) {
    setState(
      () {
        this.indice = indiceRotaSelecionada;
      },
    );
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: rotas[this.indice],
      bottomNavigationBar: BottomNavigationBar(
        currentIndex: this.indice,
        items: [
          BottomNavigationBarItem(
            icon: Icon(Icons.home),
            label: 'Primeira Rota',
          ),
          BottomNavigationBarItem(
            icon: Icon(Icons.assessment),
            label: 'Segunda Rota',
          ),
        ],
      ),
    );
  }
}
```

```
        onTap: (int indiceRotaEscolhida) {
          aoPressionar(indiceRotaEscolhida);
        },
      ),
    );
  }
}

class PrimeiraRota extends StatefulWidget {
  @override
  PrimeiraRotaState createState() => PrimeiraRotaState();
}

class PrimeiraRotaState extends State<PrimeiraRota> {
  @override
  Widget build(BuildContext context) {
    TextStyle estilo = TextStyle(
      fontSize: 30,
      fontWeight: FontWeight.bold,
      color: Colors.green,
    );

    return Center(
      child: Text(
        'Primeira Rota',
        style: estilo,
      ),
    );
  }
}

class SegundaRota extends StatefulWidget {
  @override
  SegundaRotaState createState() => SegundaRotaState();
}

class SegundaRotaState extends State<SegundaRota> {
  @override
  Widget build(BuildContext context) {
    return ListView(
      children: [
        Padding(
          padding: EdgeInsets.all(40),
          child: Center(
            child: Text(
              'Galeria',
              style: TextStyle(
```



```
        fontSize: 30,  
        color: Colors.red,  
        fontWeight: FontWeight.bold,  
      ),  
    ),  
  ),  
),  
Cartao(  
  titulo: 'Imagem 01',  
  descricao:  
    'Lorem Ipsum is simply dummy text of the printing and  
typesetting industry. Lorem Ipsum has been the industry\'s standard dummy text  
ever since the 1500s, when an unknown printer took a galley of type and  
scrambled it to make a type specimen book. It has survived not only five  
centuries, but also the leap into electronic typesetting, remaining  
essentially unchanged. It was popularised in the 1960s with the release of  
Letraset sheets containing Lorem Ipsum passages, and more recently with  
desktop publishing software like Aldus PageMaker including versions of Lorem  
Ipsum.',  
  preco: 3.10,  
  url:  
    'https://images.pexels.com/photos/213795/pexels-photo-  
213795.jpeg?auto=compress&cs=tinysrgb&dpr=1&w=500',  
),  
Cartao(  
  titulo: 'Imagem 02',  
  descricao:  
    'Lorem Ipsum is simply dummy text of the printing and  
typesetting industry. Lorem Ipsum has been the industry\'s standard dummy text  
ever since the 1500s, when an unknown printer took a galley of type and  
scrambled it to make a type specimen book. It has survived not only five  
centuries, but also the leap into electronic typesetting, remaining  
essentially unchanged. It was popularised in the 1960s with the release of  
Letraset sheets containing Lorem Ipsum passages, and more recently with  
desktop publishing software like Aldus PageMaker including versions of Lorem  
Ipsum.',  
  preco: 2.15,  
  url:  
    'https://images.pexels.com/photos/213791/pexels-photo-  
213791.jpeg?auto=compress&cs=tinysrgb&dpr=1&w=500',  
),  
Cartao(  
  titulo: 'Imagem 03',  
  descricao:  
    'Lorem Ipsum is simply dummy text of the printing and  
typesetting industry. Lorem Ipsum has been the industry\'s standard dummy text  
ever since the 1500s, when an unknown printer took a galley of type and
```

```
scrambled it to make a type specimen book. It has survived not only five
centuries, but also the leap into electronic typesetting, remaining
essentially unchanged. It was popularised in the 1960s with the release of
Letraset sheets containing Lorem Ipsum passages, and more recently with
desktop publishing software like Aldus PageMaker including versions of Lorem
Ipsum.',
    preco: 2.95,
    url:
      'https://images.pexels.com/photos/213797/pexels-photo-
213797.jpeg?auto=compress&cs=tinysrgb&dpr=1&w=500',
  ),
  Cartao(
    titulo: 'Imagem 04',
    descricao:
      'Lorem Ipsum is simply dummy text of the printing and
typesetting industry. Lorem Ipsum has been the industry\'s standard dummy text
ever since the 1500s, when an unknown printer took a galley of type and
scrambled it to make a type specimen book. It has survived not only five
centuries, but also the leap into electronic typesetting, remaining
essentially unchanged. It was popularised in the 1960s with the release of
Letraset sheets containing Lorem Ipsum passages, and more recently with
desktop publishing software like Aldus PageMaker including versions of Lorem
Ipsum.',
    preco: 1.97,
    url:
      'https://images.pexels.com/photos/213798/pexels-photo-
213798.jpeg?auto=compress&cs=tinysrgb&dpr=1&w=500',
  ),
],
);
}
}

class Cartao extends StatelessWidget {
  final String titulo;
  final String descricao;
  final double preco;
  final String url;

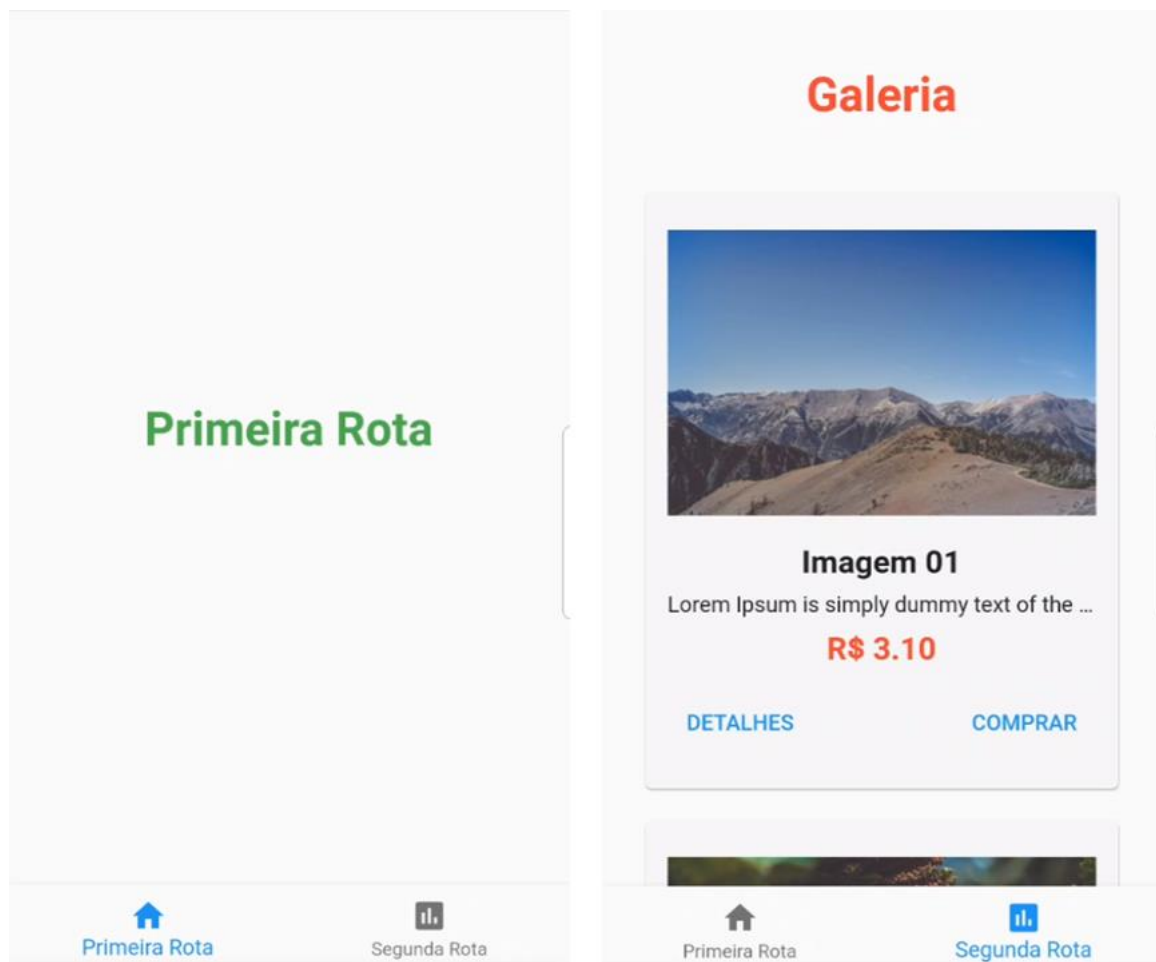
  Cartao({
    required this.titulo,
    required this.descricao,
    required this.preco,
    required this.url,
  });

  @override
```

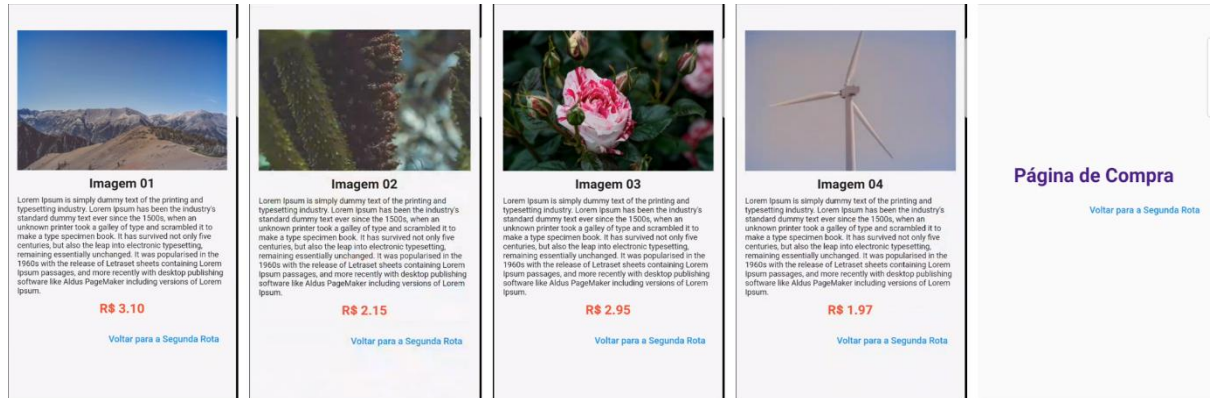
```
Widget build(BuildContext context) {  
  return Card(  
    color: Colors.grey[100],  
    margin: EdgeInsets.fromLTRB(30, 5, 30, 15),  
    child: Container(  
      padding: EdgeInsets.all(10),  
      child: Column(  
        crossAxisAlignment: CrossAxisAlignment.center,  
        children: <Widget>[  
          Padding(  
            padding: EdgeInsets.all(4),  
            child: Image(  
              image: NetworkImage(this.url),  
              height: 200,  
              width: 400,  
            ),  
          ),  
          Padding(  
            padding: EdgeInsets.all(4),  
            child: Text(  
              this.titulo,  
              style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold),  
            ),  
          ),  
          Padding(  
            padding: EdgeInsets.all(4),  
            child: Text(  
              this.descricao,  
              maxLines: 1,  
              overflow: TextOverflow.ellipsis,  
              style: TextStyle(fontSize: 14),  
            ),  
          ),  
          Padding(  
            padding: EdgeInsets.all(4),  
            child: Text(  
              'R\$ ${this.preco.toStringAsFixed(2)}',  
              style: TextStyle(  
                fontSize: 20,  
                color: Colors.red,  
                fontWeight: FontWeight.bold,  
              ),  
            ),  
          ),  
          ButtonBar(  
            alignment: MainAxisAlignment.spaceBetween,  
            children: <Widget>[
```

```
        TextButton(
          child: Text('DETALHES'),
          onPressed: () {},
        ),
        TextButton(
          child: Text('COMPRAR'),
          onPressed: () {},
        ),
      ],
    ),
  ],
),
);
}
```

O algoritmo gera um aplicativo com um widget BottomNavigationBar. O widget BottomNavigationBar possui duas rotas. Cada rota é gerada por um widget diferente: PrimeiraRota e SegundaRota:



Altere o algoritmo para que, ao clicar nos botões “DETALHES” e “COMPRAR”, o usuário seja direcionado para as rotas apresentadas abaixo:



OBS: não é necessário implementar o pagamento na página de compra, mas é necessário implementar a funcionalidade do botão que realiza a volta para a segunda rota.

Dica:

Observe o uso do widget `SingleChildScrollView` (<https://api.flutter.dev/flutter/widgets/SingleChildScrollView-class.html>):

```
class TerceiraRota extends StatelessWidget {
  final String titulo;
  final String descricao;
  final double preco;
  final String url;

  TerceiraRota({
    required this.titulo,
    required this.descricao,
    required this.preco,
    required this.url,
  });

  @override
  Widget build(BuildContext context) {
    return Card(
      color: Colors.grey[100],
      margin: EdgeInsets.fromLTRB(30, 5, 30, 15),
      child: Container(
```

```
padding: EdgeInsets.all(10),
child: SingleChildScrollView(
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.center,
    mainAxisAlignment: MainAxisAlignment.max,
    children: <Widget>[
      Padding(
        padding: EdgeInsets.fromLTRB(4, 50, 4, 4),
        child: Image(
          image: NetworkImage(this.url),
        ),
      ),
      Padding(
        padding: EdgeInsets.all(4),
        child: Text(
          this.titulo,
          style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold),
        ),
      ),
      Padding(
        padding: EdgeInsets.all(4),
        child: Text(
          this.descricao,
          style: TextStyle(fontSize: 12),
        ),
      ),
      Padding(
        padding: EdgeInsets.all(4),
        child: Text(
          'R\$ ${this.preco.toStringAsFixed(2)}',
          style: TextStyle(
            fontSize: 20,
            color: Colors.red,
            fontWeight: FontWeight.bold,
          ),
        ),
      ),
      ButtonBar(
        children: <Widget>[
          TextButton(
            child: Text('Voltar para a Segunda Rota'),
            onPressed: () {
              Navigator.pop(context);
            },
          ),
        ],
      ),
    ],
  ),
)
```

