



Centro Universitário UNA

Usabilidade, Desenvolvimento Web,
Mobile e Jogos

Graduação – TI e Engenharias

Práticas de Laboratório

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Flutter



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/>, 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 framework, o índice da página selecionada pelo usuário é armazenado na variável “pageTapped”. No evento “onTap”, o valor de “pageTapped” é passado para a variável “índice” 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 rotaSelecionada) {
    setState(
      () {
        this.indice = rotaSelecionada;
      },
    );
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: rotas[this.indice],
      bottomNavigationBar: BottomNavigationBar(
        currentIndex: this.indice,
```



```
        items: [
            BottomNavigationBarItem(
                icon: Icon(Icons.home),
                title: Text('Primeira Rota'), //substituir por -
> label: 'Primeira Rota',
            ),
            BottomNavigationBarItem(
                icon: Icon(Icons.assessment),
                title: Text('Segunda Rota'), //substituir por -
> label: 'Segunda Rota',
            ),
        ],
        onTap: (int pageTapped) {
            aoPressionar(pageTapped);
        },
    ),
);
}
}

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],
    );

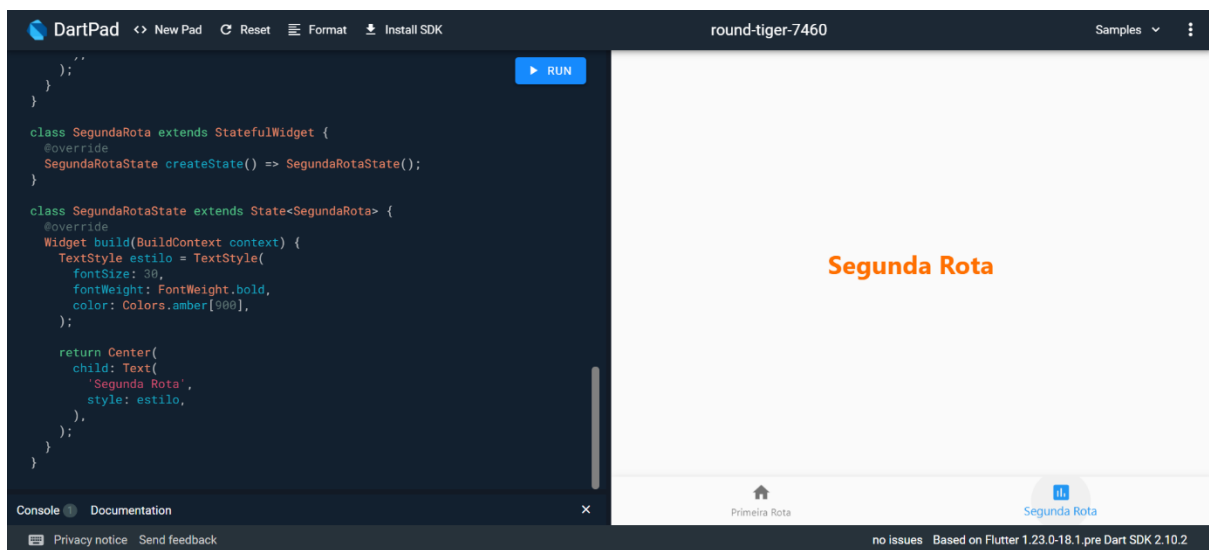
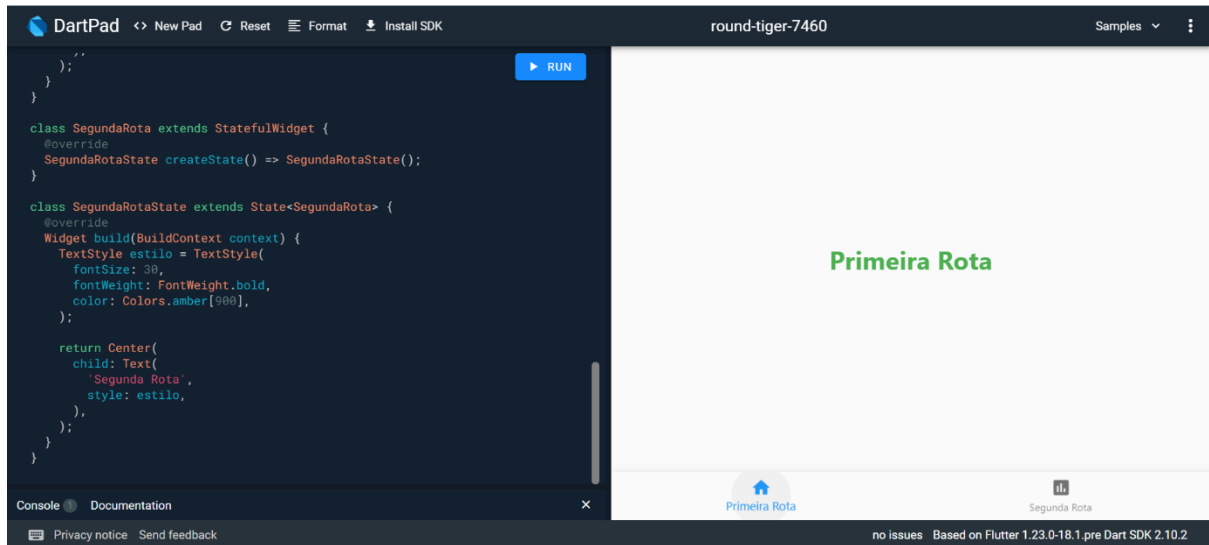
    return Center(
      child: Text(
        'Segunda Rota',
        style: estilo,
      ),
    );
  }
}
```

OBS: dependendo da versão do framework Flutter que você estiver usando, será necessário substituir o atributo title dos widgets BottomNavigationBarItem por label, como indicado abaixo:

```
BottomNavigationBarItem(
  icon: Icon(Icons.home),
  title: Text('Primeira Rota'), //substituir por -> label: 'Primeira Rota',
),
```



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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 rotaSelecionada) {
    setState(
      () {
        this.indice = rotaSelecionada;
      },
    );
  }

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




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

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',  
  subtítulo:  
    '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',  
  subtítulo:  
    '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',
```



```
        subtítulo:
            '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.',
            preço: 2.95,
            url:
                'https://images.pexels.com/photos/213797/pexels-photo-213797.jpeg?auto=compress&cs=tinysrgb&dpr=1&w=500',
        ),
        Cartao(
            título: 'Imagem 04',
            subtítulo:
                '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.',
            preço: 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 título;
    final String subtítulo;
    final double preço;
    final String url;

    Cartao({this.título, this.subtítulo, this.preço, this.url});

    @override
```



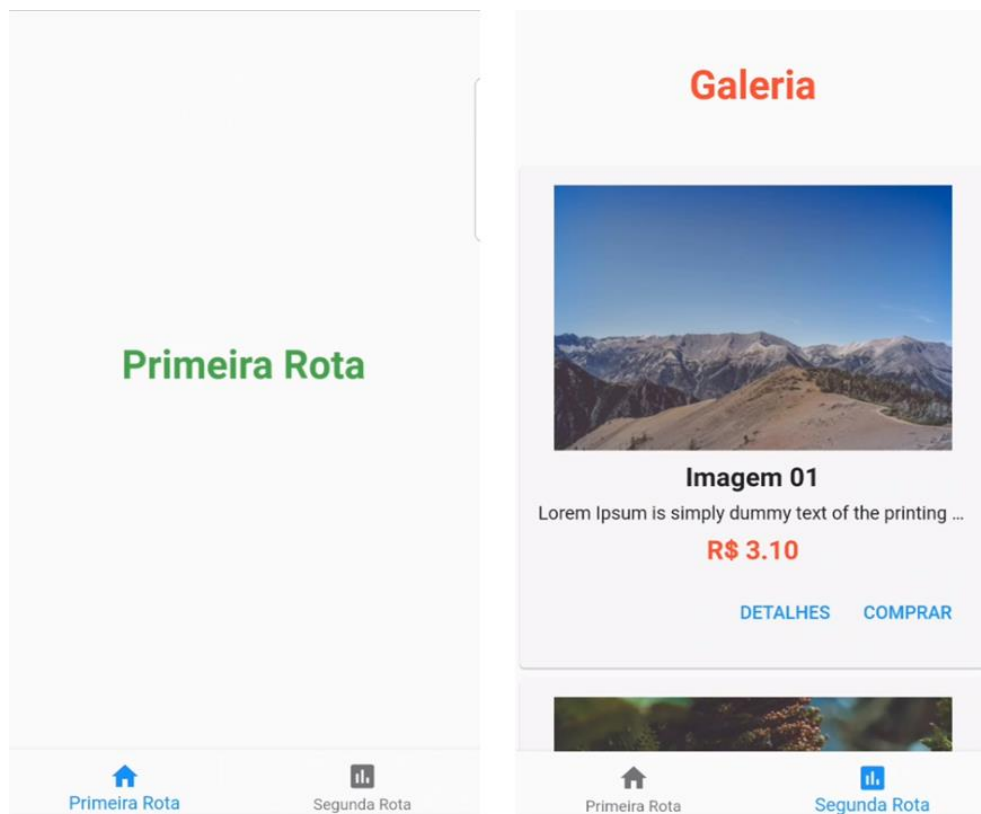
```
Widget build(BuildContext context) {  
  return Card(  
    color: Colors.grey[100],  
    child: Container(  
      padding: EdgeInsets.all(10),  
      child: Column(  
        crossAxisAlignment: CrossAxisAlignment.center,  
        children: <Widget>[  
          Padding(  
            padding: 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.subtitulo,  
              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(  

```



```
children: <Widget>[  
  FlatButton(  
    child: Text('DETALHES'),  
    onPressed: () {},  
  ),  
  FlatButton(  
    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:





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

 <p>Imagem 01</p> <p> 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.</p> <p>R\$ 3.10</p> <p>Voltar para a Segunda Rota</p>	 <p>Imagem 02</p> <p> 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.</p> <p>R\$ 2.15</p> <p>Voltar para a Segunda Rota</p>	 <p>Imagem 03</p> <p> 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.</p> <p>R\$ 2.95</p> <p>Voltar para a Segunda Rota</p>	 <p>Imagem 04</p> <p> 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.</p> <p>R\$ 1.97</p> <p>Voltar para a Segunda Rota</p>	<p>Página de Compra</p> <p>Voltar para a Segunda Rota</p>
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OBS: não é necessário implementar o pagamento na página de compra, mas é necessário implementar a funcionalidade do botão de volta para a segunda rota.