



Al-Mustaqbal University
College of Science
Intelligent Medical System Department



College of Sciences
Intelligent Medical System
Department



Lecture 5

TabBar in Flutter

Subject: Mobile Applications

Level: Third

Semester: second

Lecturer: Asst. Lect. Ali Saleem Haleem



Google Class Room

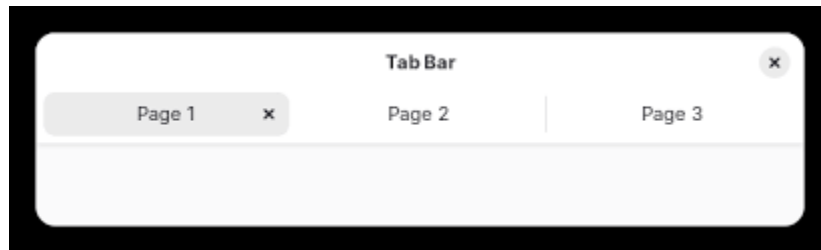
Study Year: 2025-2026



Introduction

TabBar in Flutter is a widget used to create tabs at the top of the screen so the user can switch between multiple pages or sections, such as:

- Home
- Profile
- Settings



It usually works together with:

- DefaultTabController
- TabBar
- TabBarView

According to the official Flutter docs, TabBar displays the row of tabs, while TabBarView displays the page that matches the currently selected tab, and both must have the same number of items.

How it works

1) DefaultTabController

This controls which tab is currently selected.

2) TabBar

This is the visible bar that contains the tab titles or icons.



3) TabBarView

This shows the content of each tab.

Also, Flutter commonly places TabBar inside AppBar.bottom.

When to use TabBar

Use it when you have closely related sections in the same screen, for example:

- Students / Teachers / Courses
- Login / Register
- Pending / Approved / Rejected

Do not use it for major app navigation between unrelated main sections. For that, top-level navigation widgets such as NavigationBar or other primary navigation patterns are usually more suitable.

Example 1 :

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

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      home: const TabBarExample(),
    );
  }
}

class TabBarExample extends StatelessWidget {
  const TabBarExample({super.key});
```

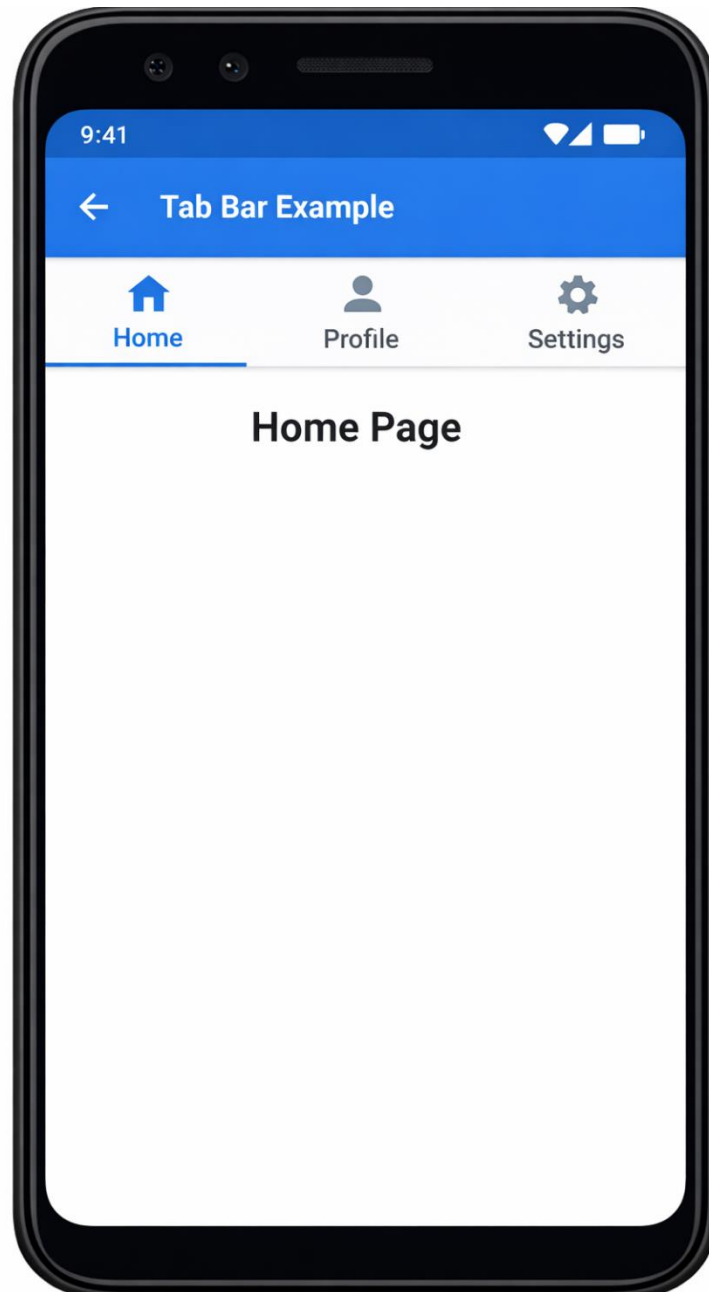


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```
@override
Widget build(BuildContext context) {
  return DefaultTabController(
    length: 3, // number of tabs
    child: Scaffold(
      appBar: AppBar(
        title: const Text('Tab Bar Example'),
        bottom: const TabBar(
          tabs: [
            Tab(icon: Icon(Icons.home), text: 'Home'),
            Tab(icon: Icon(Icons.person), text: 'Profile'),
            Tab(icon: Icon(Icons.settings), text: 'Settings'),
          ],
        ),
      ),
      body: const TabBarView(
        children: [
          Center(child: Text('Home Page')),
          Center(child: Text('Profile Page')),
          Center(child: Text('Settings Page')),
        ],
      ),
    ),
  );
}
```



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Example 2 :

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

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      home: const MyTabBarExample(),
    );
  }
}

class MyTabBarExample extends StatelessWidget {
  const MyTabBarExample({super.key});

  @override
  Widget build(BuildContext context) {
    return DefaultTabController(
      length: 4,
      child: Scaffold(
        appBar: AppBar(
          title: const Text("Student App"),
          backgroundColor: Colors.teal,
          bottom: const TabBar(
            tabs: [
              Tab(icon: Icon(Icons.book), text: "Courses"),
              Tab(icon: Icon(Icons.assignment), text: "Tasks"),
              Tab(icon: Icon(Icons.grade), text: "Grades"),
              Tab(icon: Icon(Icons.person), text: "Profile"),
            ],
          ),
        ),
        body: const TabBarView(
          children: [
            Center(
```



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```
child: Text(  
    "Courses Page",  
    style: TextStyle(fontSize: 24),  
),  
,  
Center(  
    child: Text(  
        "Tasks Page",  
        style: TextStyle(fontSize: 24),  
    ),  
),  
Center(  
    child: Text(  
        "Grades Page",  
        style: TextStyle(fontSize: 24),  
    ),  
),  
Center(  
    child: Text(  
        "Profile Page",  
        style: TextStyle(fontSize: 24),  
    ),  
),  
],  
),  
),  
);  
}
```