

Building Flutter Responsive Split-Screen Application



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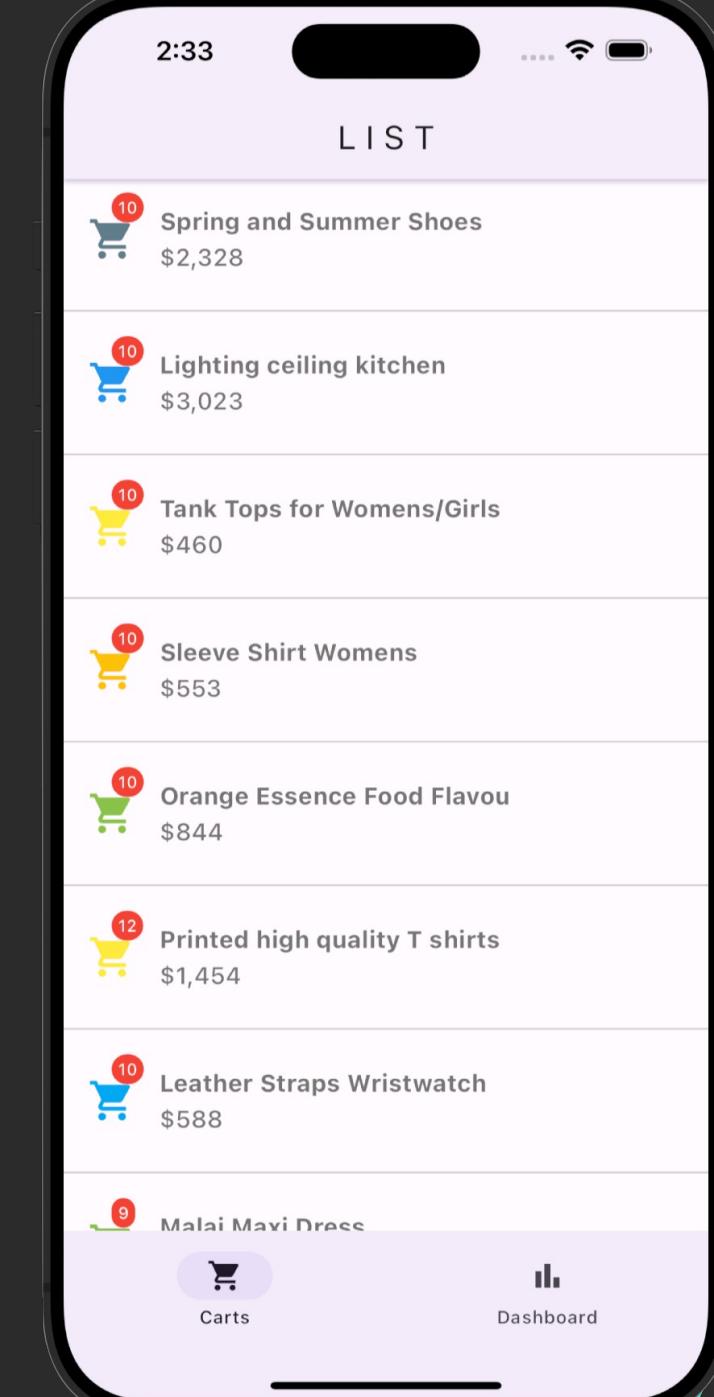
Overview – Tasks & Goals

Need to create a multi-platform phone, tablet, desktop, and web app and to be fully responsive with a single code base?

Wait... and it requires also to handle responsively a Split-Screen List/Detail layout on the same screen depending on the device and full navigation from List to Detail page on phones?

But wait, on desktop, and web you are required to handle both mobile and desktop, and web layout when the user changes the size of the app's screen?

One more thing, also do not use any third-party plugins or packages?

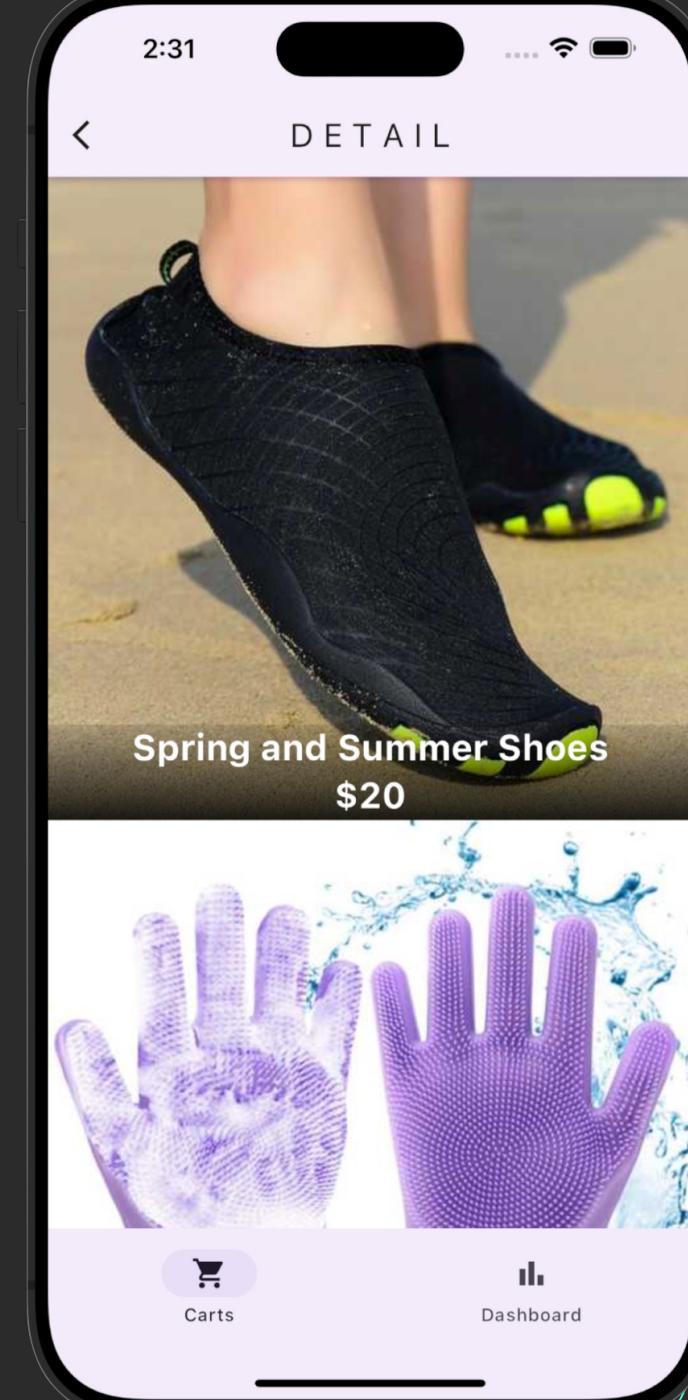


Overview - Course Demo App's

First – You'll explore how to analyze the application's common features containing reusable logic, and widgets.

Next – Create the Responsive Split-Screen project for phone, tablet, desktop, and web app. For phone applications, you'll navigate from the List page to the Details page. For tablet, desktop, and web, you'll create a Split-Screen layout showing the List and Detail pages on the same screen.

Furthermore - Implement Dark and Light mode, create a simple and elegant global State Management, and the Responsive Layout Builder widget.

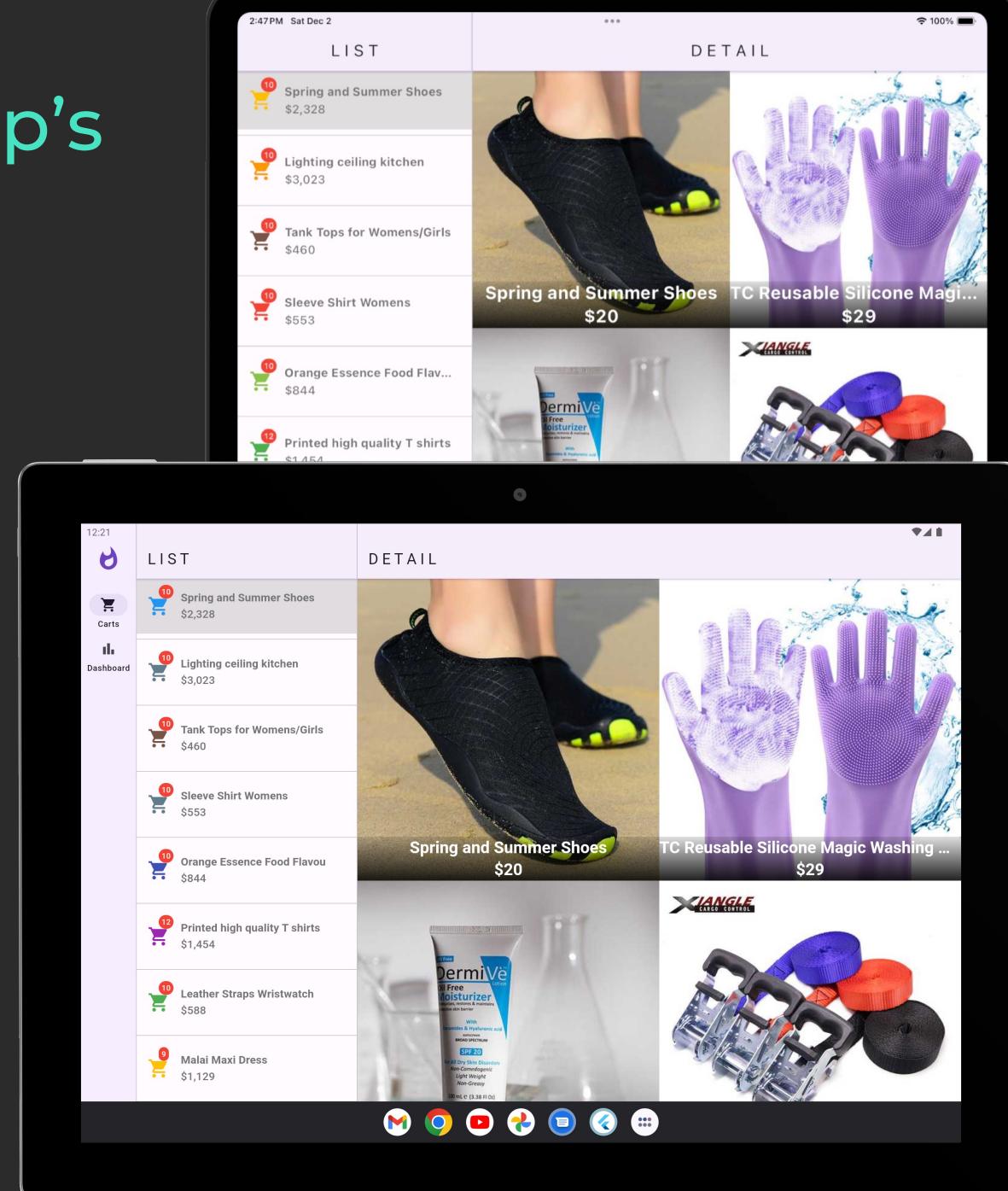


Overview - Course Demo App's

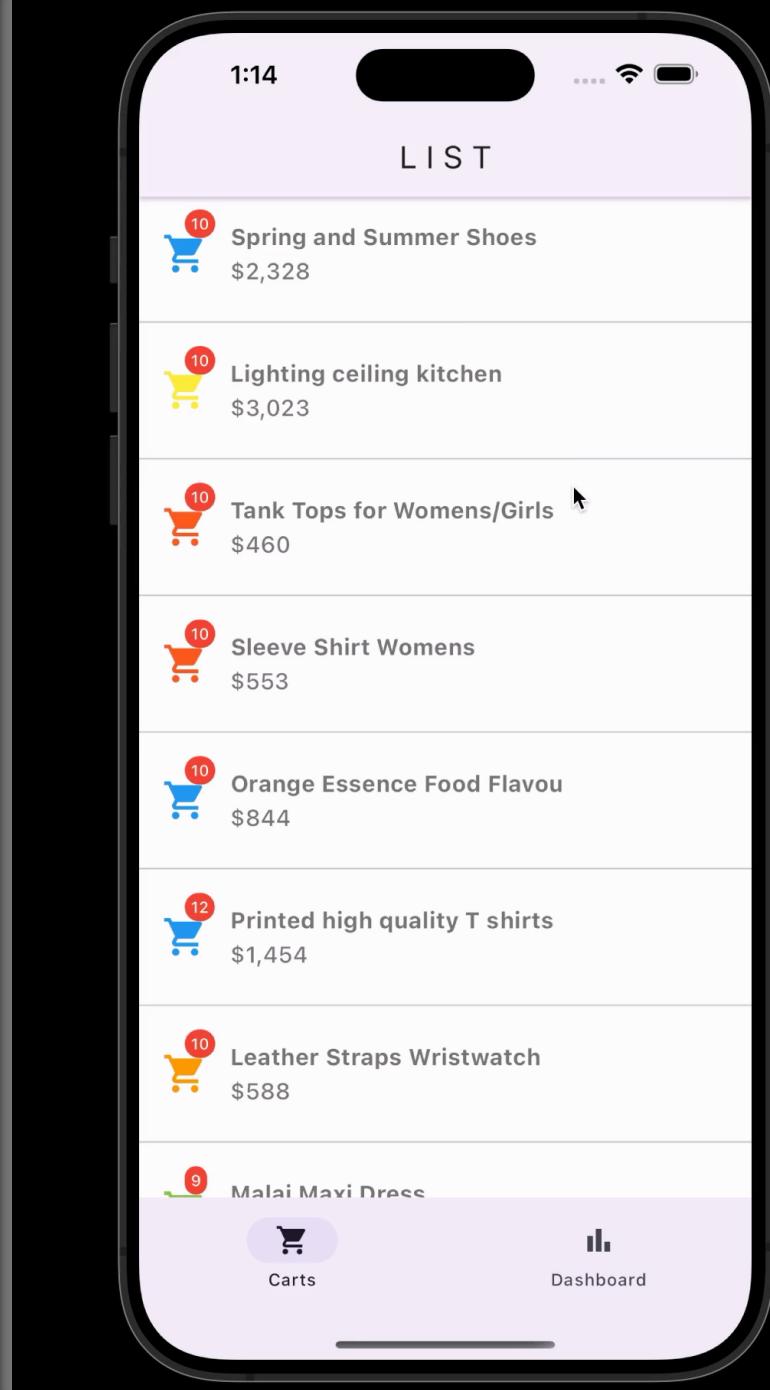
Moving on, create the List and Detail pages.

Lastly – Create the Split-Screen pages.

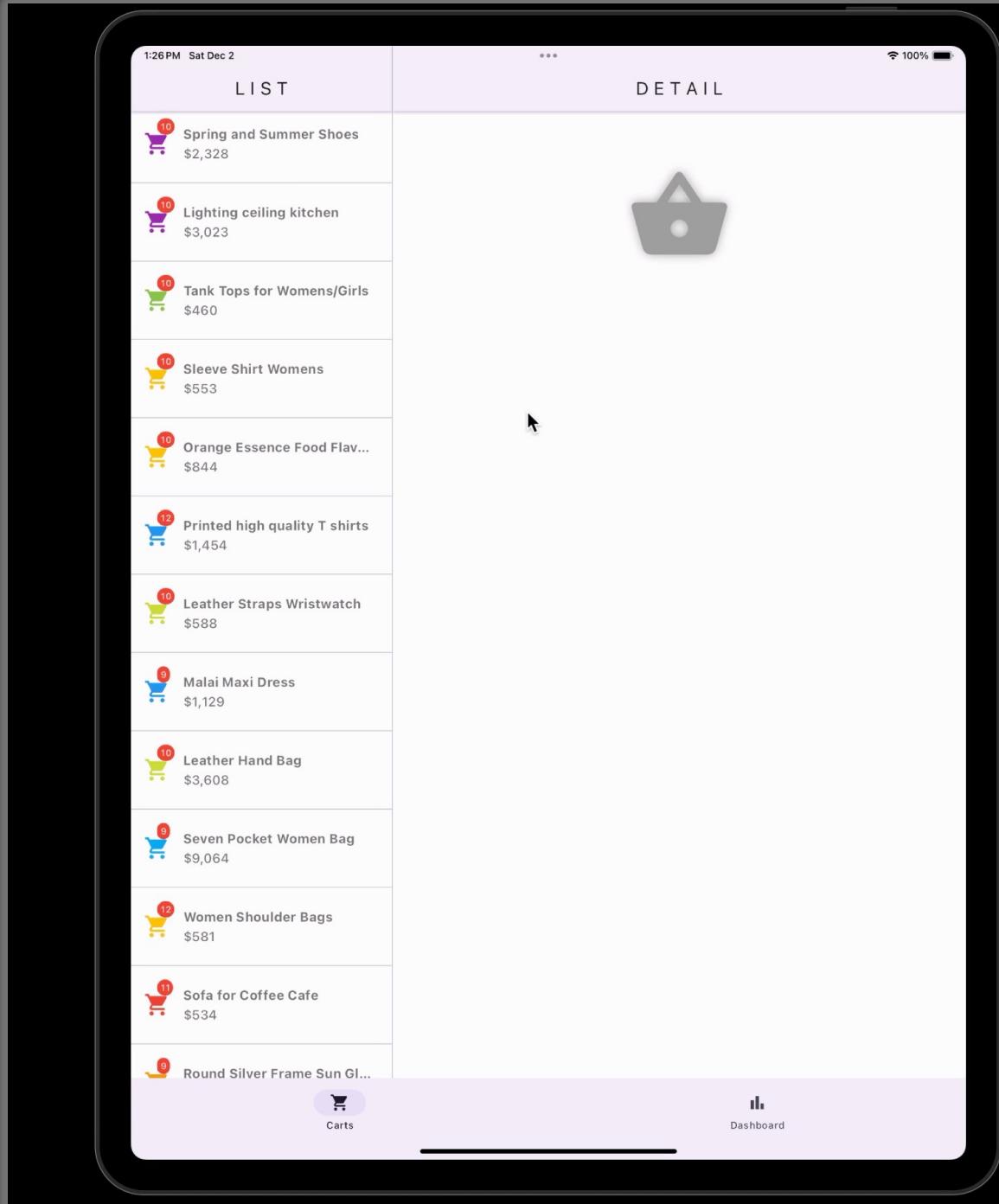
Finally, in the end, you'll have a Responsive Split-Screen List/Detail app that runs on phones, tablets, desktops, and the web from a single code base, with no third-party packages needed.



Phone Navigation



Tablet Split-Screen Navigation



macOS - Mobile & Split-Screen Navigation

responsive_split_screen

L I S T

D E T A I L

- Spring and Summer Shoes
\$2,328
- Lighting ceiling kitchen
\$3,023
- Tank Tops for Womens/Girls
\$460
- Sleeve Shirt Womens
\$553
- Orange Essence Food Flavou
\$844
- Printed high quality T shirts
\$1,454
- Leather Straps Wristwatch
\$588
- Malai Maxi Dress
\$1,120

Carts

Dashboard



Windows - Mobile & Split-Screen Navigation

The screenshot shows a Windows application window titled "responsive_split_screen". The interface is designed to mimic a mobile device's screen and a larger desktop-like screen.

Left Side (Mobile Screen):

- Header:** Shows a purple icon with a flame-like symbol and the word "LIST".
- Navigation:** Includes a purple circle with a shopping cart icon labeled "Carts" and a bar chart icon labeled "Dashboard".
- Content:** A list of items with small icons and red notification bubbles:
 - Spring and Summer Shoes (\$2,328)
 - Lighting ceiling kitchen (\$3,023)
 - Tank Tops for Womens/Girls (\$460)
 - Sleeve Shirt Womens (\$553)
 - Orange Essence Food Flavou (\$844)
 - Printed high quality T shirts (\$1,454)
 - Leather Straps Wristwatch (\$588)
 - Malai Maxi Dress (9)

Right Side (Desktop Screen):

- Header:** Shows the word "DETAIL" in capital letters.
- Content:** Displays a large gray shopping cart icon with a white circle inside, centered on the screen.

Web - Mobile & Split-Screen Navigation

The screenshot illustrates a responsive web application designed for both mobile and desktop users. The interface is split into two main sections: a sidebar on the left and a main content area on the right.

Left Sidebar (Mobile Navigation):

- Carts:** Represented by a shopping cart icon.
- Dashboard:** Represented by a bar chart icon.

Right Content Area (Desktop View):

The main content area is divided into two sections: **LIST** (left) and **DETAIL** (right). The **LIST** section displays a list of products with the following details:

- Spring and Summer Shoes: \$2,328
- Lighting ceiling kitchen: \$3,023
- Tank Tops for Womens/Girls: \$460
- Sleeve Shirt Womens: \$553
- Orange Essence Food Flavou: \$844
- Printed high quality T shirts: \$1,454
- Leather Straps Wristwatch: \$588

The **DETAIL** section is currently inactive, showing a large, semi-transparent shopping cart icon.

Foldable - Experimental Mobile & Split-Screen Navi



5:50 A

L I S T D E T A I L

Spring and Summer Shoes \$2,328	
Lighting ceiling kitchen \$3,023	
Tank Tops for Womens/Girls \$460	
Sleeve Shirt Womens \$553	
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Carts

Dashboard



Base Structure - Opening & Reviewing the ‘Responsive Split-Screen’ Starter Project

Up Next



Base Structure - Opening & Reviewing the ‘Responsive Split-Screen’ Starter Project



Overview

- Analyzing Applications Common Features
- Importing Starter Project
 - Reviewing Root
 - main page
 - Reviewing Helpers
 - helpers/formatters
 - helpers/themes
 - Reviewing Models
 - models/cart_model
 - Reviewing State
 - state/item_state



Overview

- Reviewing Widgets
 - widgets/graph_bar
 - widgets/nav_bar
 - widgets/nav_rail
 - widgets/title_gradient_bar
- Reviewing macOS -> Runner
 - DebugProfile.entitlements
 - <key>com.apple.security.network.client</key>
<true/>
 - <key>com.apple.security.network.server</key>
<true/>





Get the Starter Project ‘Responsive Split-Screen’

Up Next

You can import the **starter project** from **source-code/starter-project** directory provided in **Study Materials** of this course



Summary

- Analyzed Applications Common Features
- Imported Starter Project
 - Reviewed Root
 - main page
 - Reviewed Helpers
 - helpers/formatters
 - helpers/themes
 - Reviewed Models
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Summary

- Reviewed Widgets
 - widgets/graph_bar
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 - widgets/nav_rail
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- Reviewed macOS -> Runner
 - DebugProfile.entitlements
 - <key>com.apple.security.network.client</key>
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Pages - Opening & Reviewing the 'Responsive Split-Screen' Starter Project

Up Next



Pages - Opening & Reviewing the 'Responsive Split-Screen' Starter Project



Overview

- Reviewing Pages
 - pages/dashboard
 - pages/item_detail
 - pages/item_list



Pages - Continue Reviewing Starter Project

You can import the **starter project** from **source-code/starter-project** directory provided in **Study Materials** of this course

Summary

- Reviewed Pages
 - pages/dashboard
 - pages/item_detail
 - pages/item_list





Creating Helpers, Widgets, and Pages

Up Next



Creating Helpers, Pages, and Widgets



Overview

- Modifying Helpers
 - helpers/constants (partial)
- Modifying Pages
 - pages/split_screen (stub)
- Creating Widgets
 - widgets/responsive_layout_builder





Live Coding



Summary

- Modified Helpers
 - helpers/constants (partial)
- Modified Pages
 - pages/split_screen (stub)
- Created Widgets
 - widgets/responsive_layout_builder





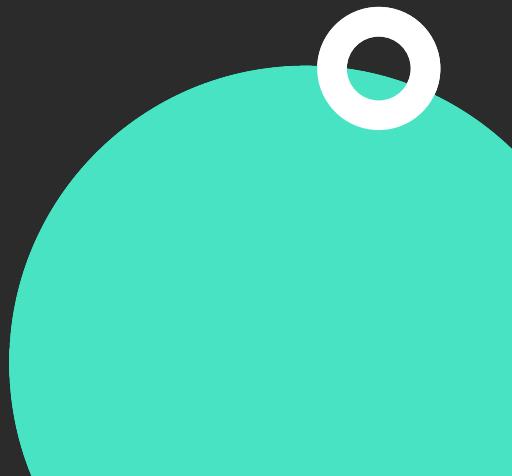
Creating the Home Page

Up Next





Creating the Home Page



Overview

- Modifying Pages
 - pages/home (stub)





Live Coding



Summary

- Modified Pages
 - pages/home





Course Summary

Up Next



‘Responsive Split-Screen’ Summary



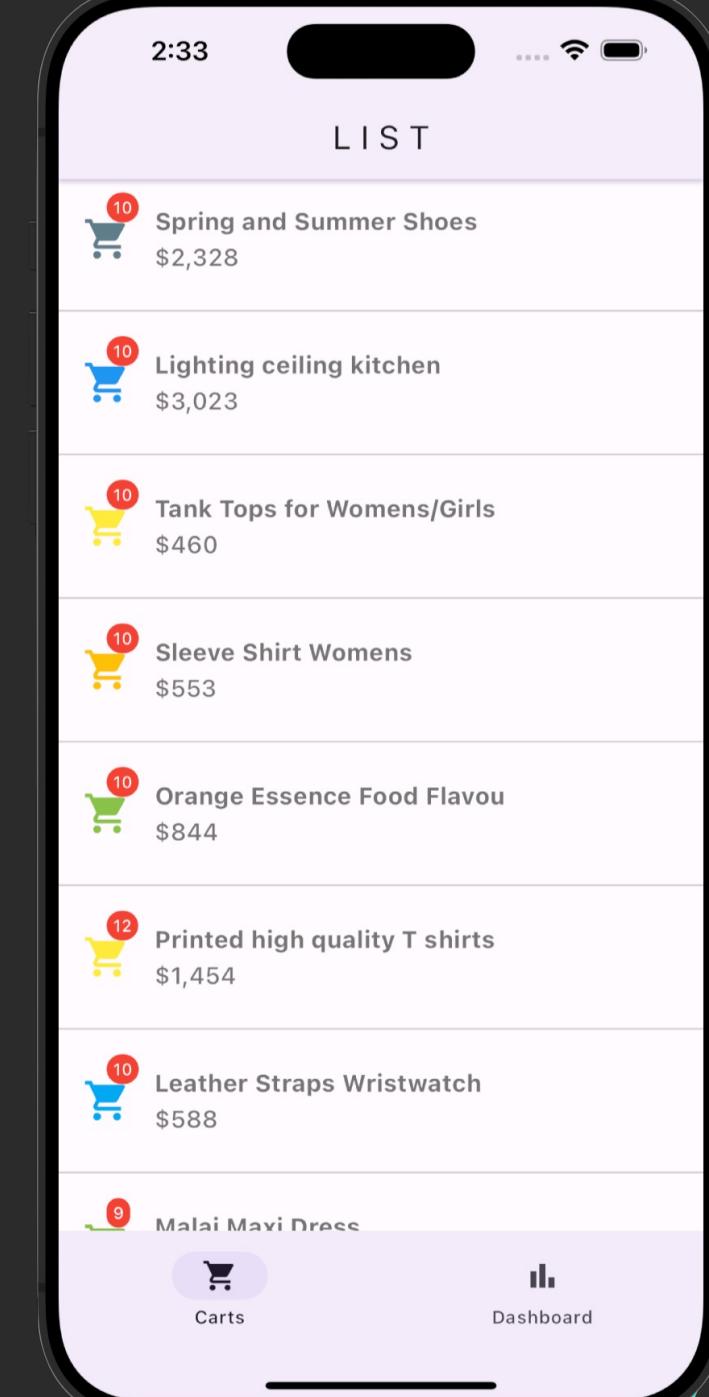
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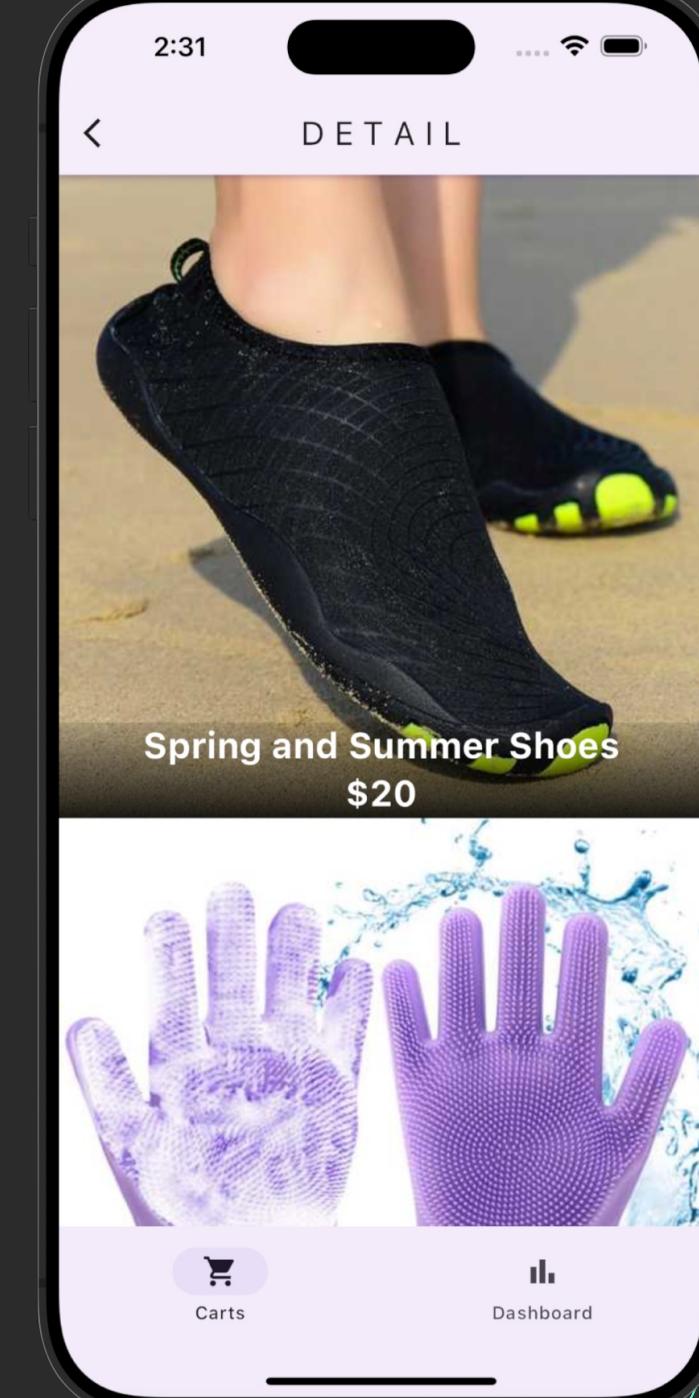


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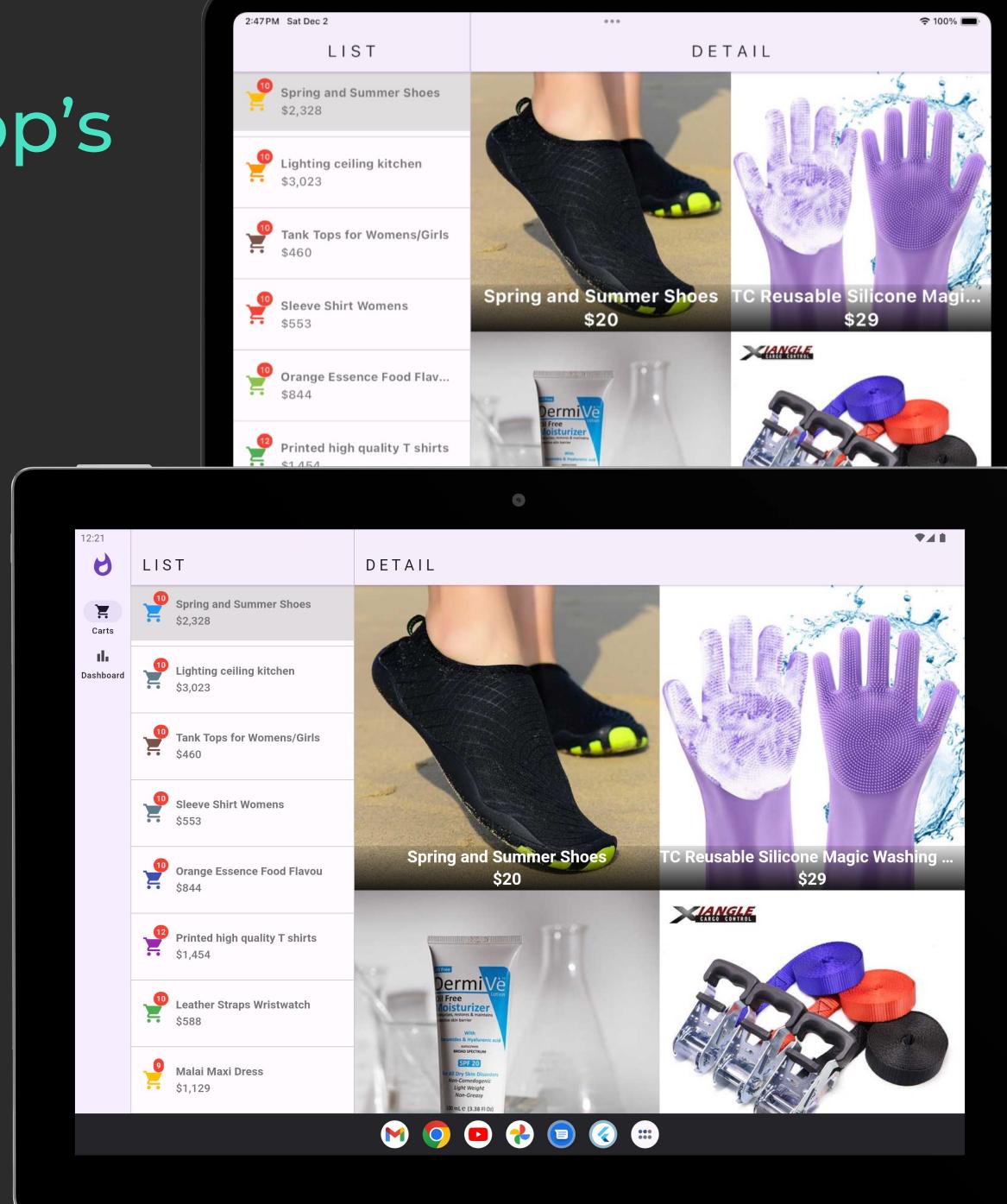


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Thank You



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