



Building Flutter Applications by Sharing a Common Code Base



Marco Napoli

X @JediPixels

YouTube @JediPixels

LinkedIn In/marco-napoli-jedipixels

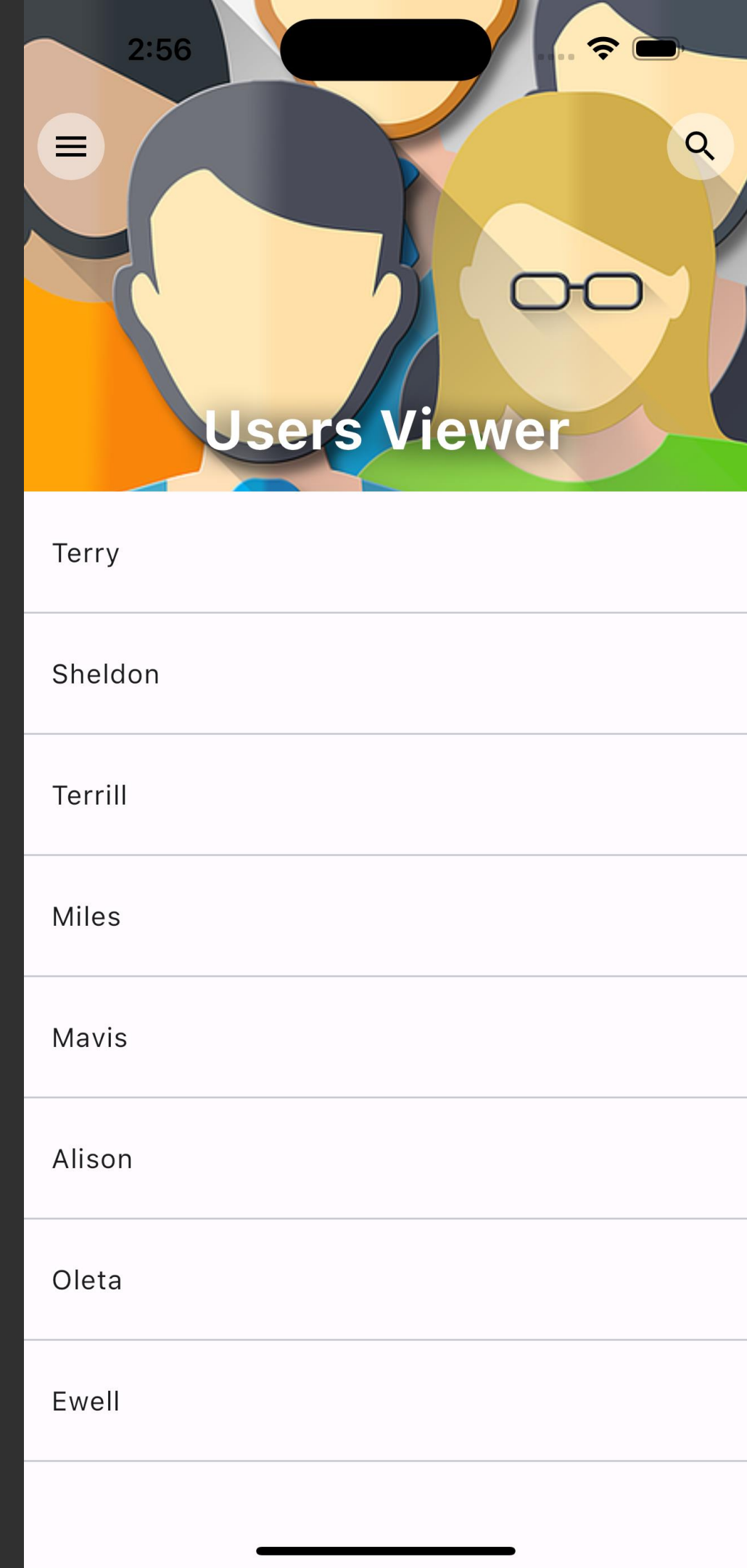
Overview – Tasks & Goals

Need to create multiple Flutter projects for Phone, Tablet, and Web with the ability to share common reusable codebase?

You'll create three projects, a single shared codebase package, and two separate Phone, Tablet, and Web apps creating patterns for an enterprise large-scale scenarios.

Analyze app's common features, and create a single shared codebase package containing logic and reusable widgets.

Phone apps navigate list & details on different pages. Tablet, and Web split-screen with list & details on the same page .



Overview - Course Demo App's

First – Create app's common features for shared codebase package containing reusable logic, and widgets.

Next – Create Users project for Mobile, Tablet & Web accessing shared codebase. Mobile apps navigate from list to details on different pages. Tablet, and Web use split-screen layout with list & details on the same page.

Furthermore - Implement responsive design, dark & light mode, and call RESTful API. **Moving on**, implement search capabilities.

Lastly – Create Product's project w/ same features as Users.



iPhone 9

iPhone X

Samsung Universe 9

OPPOF19

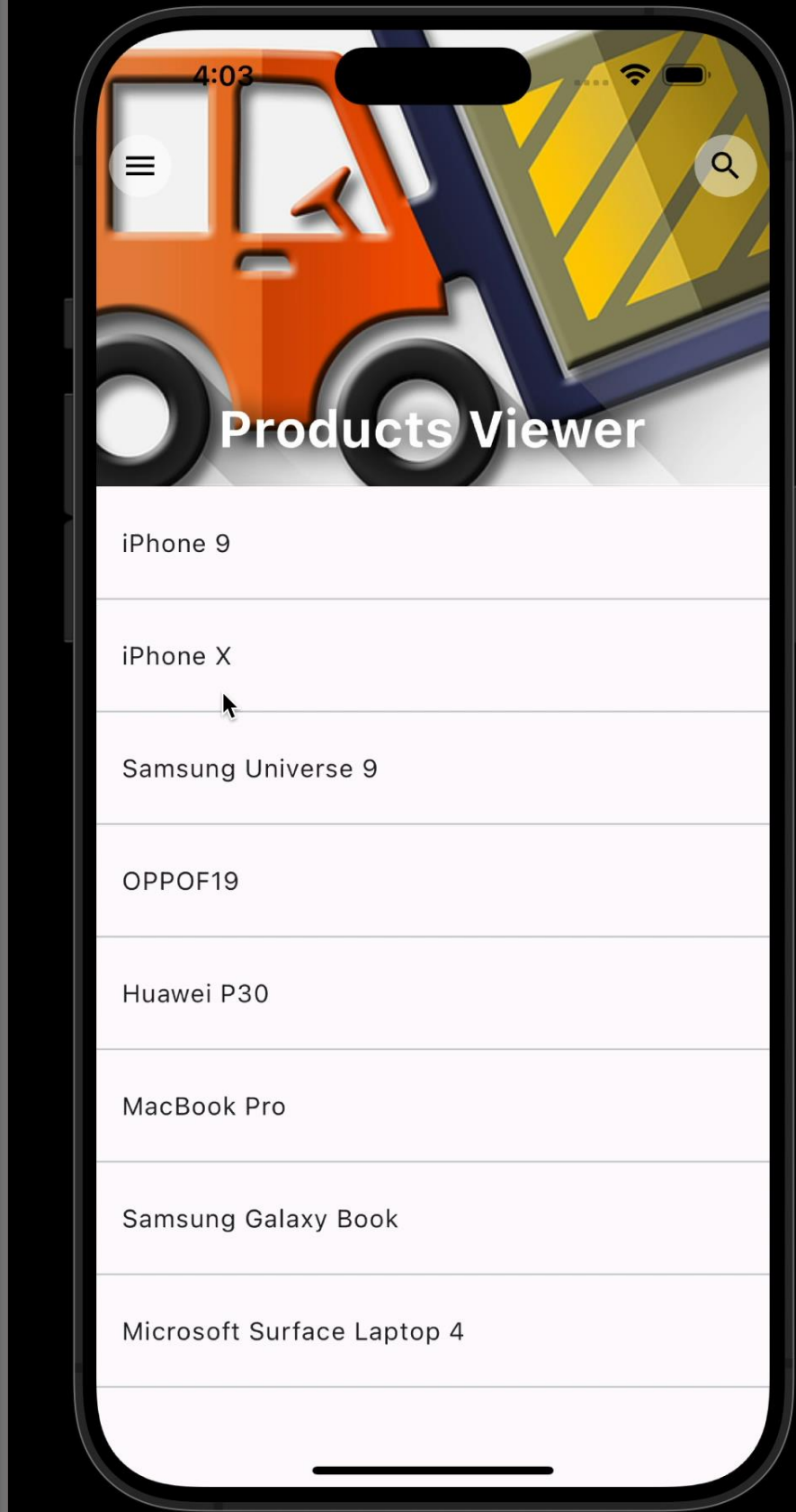
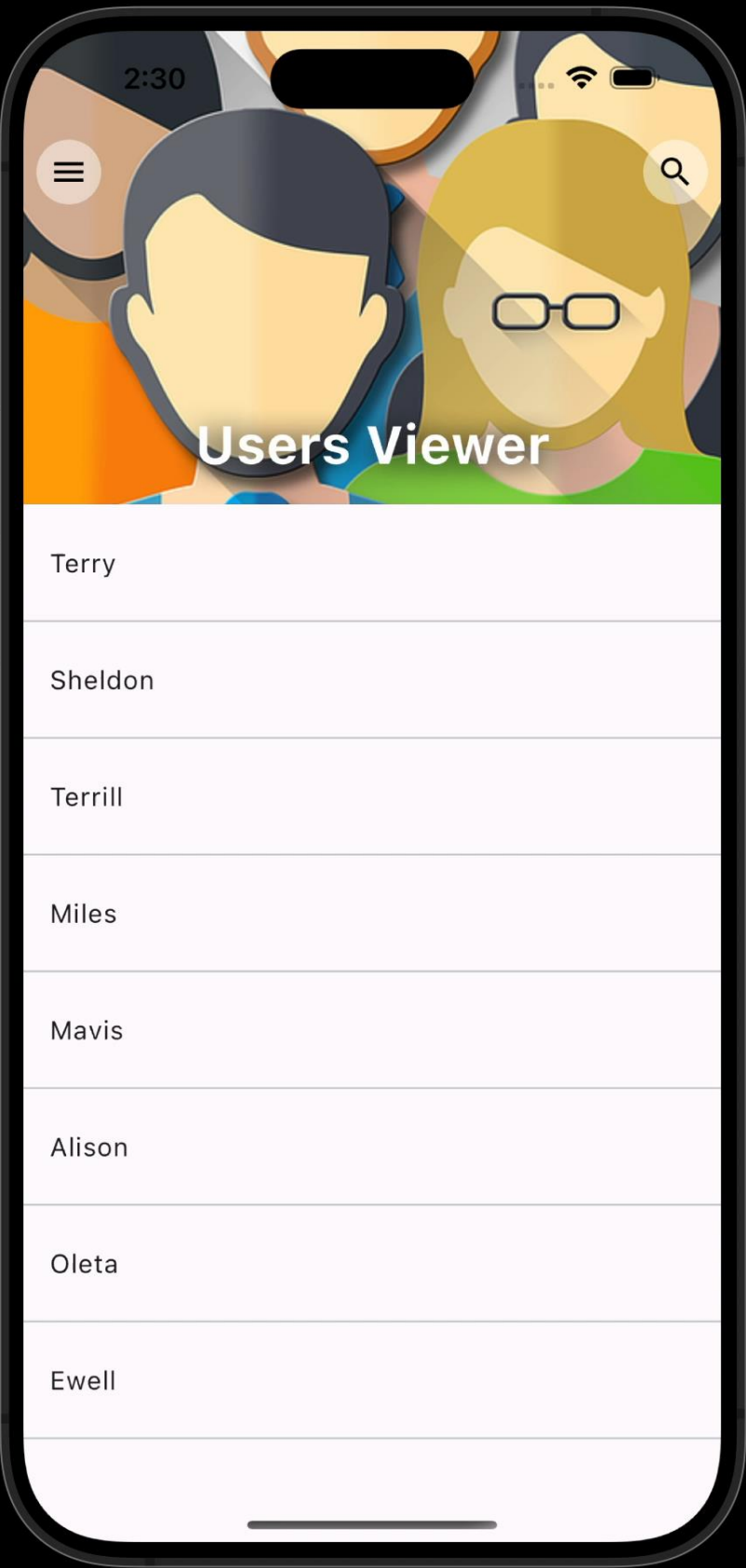
Huawei P30

MacBook Pro

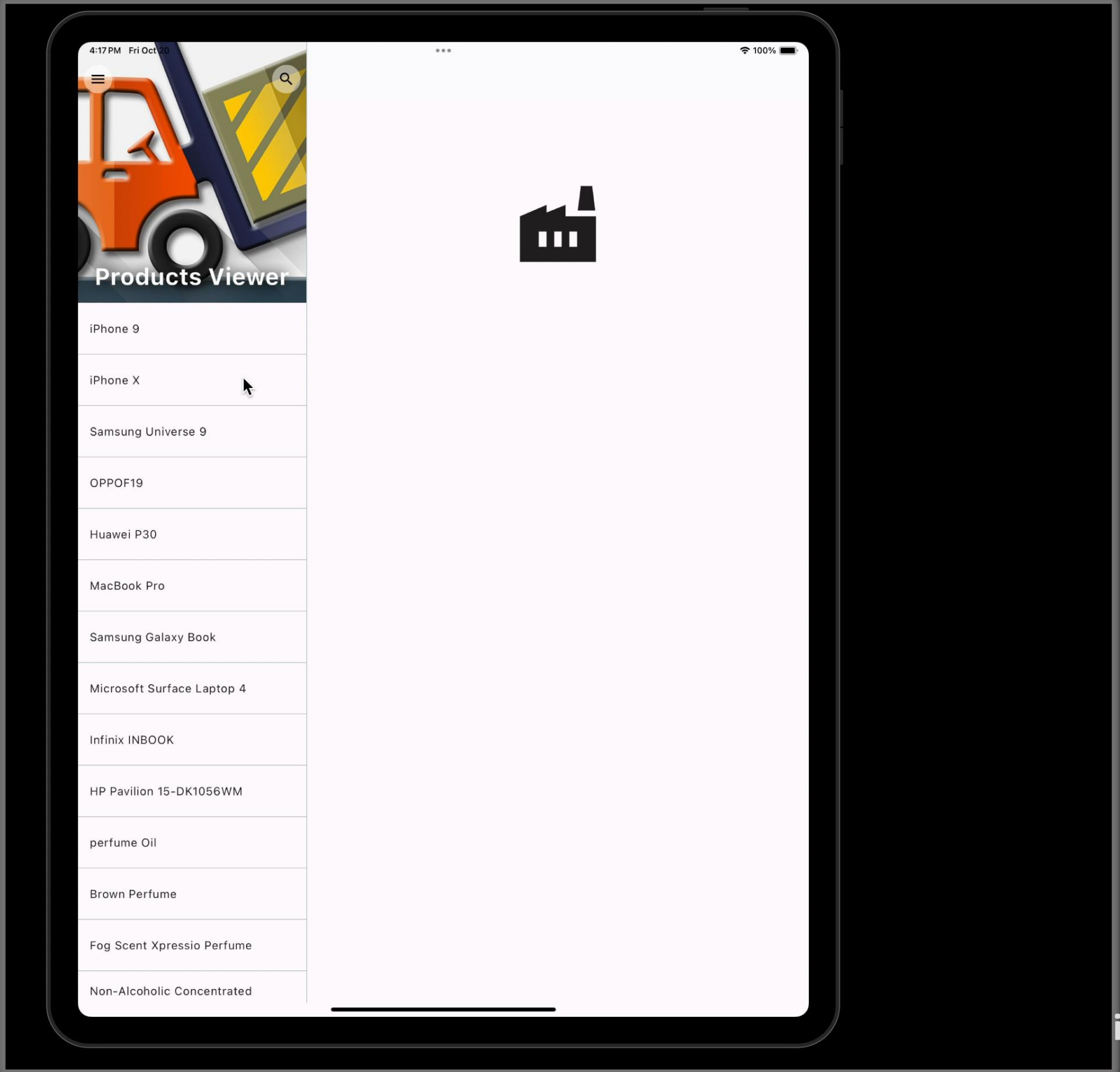
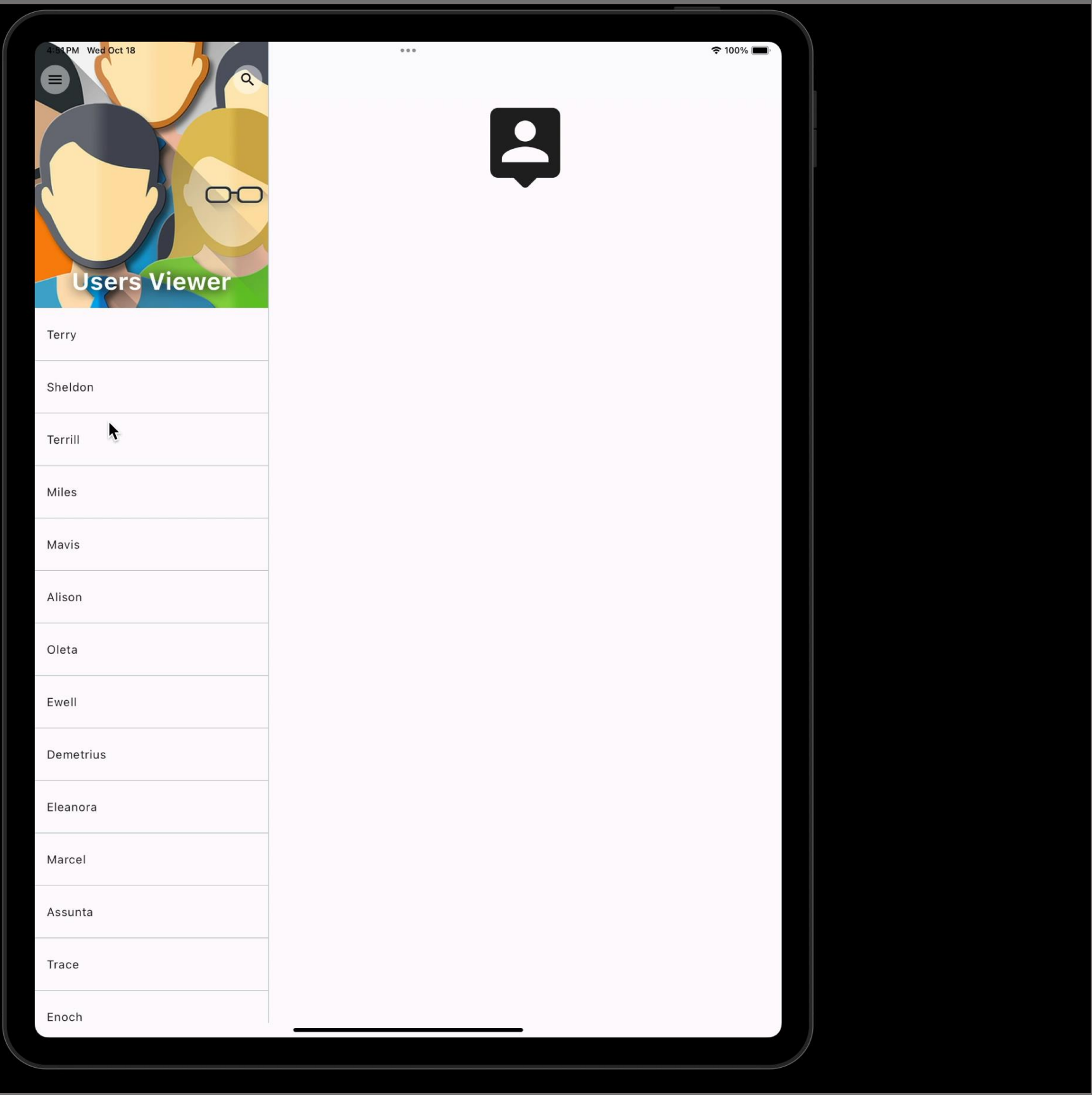
Samsung Galaxy Book

Microsoft Surface Laptop 4

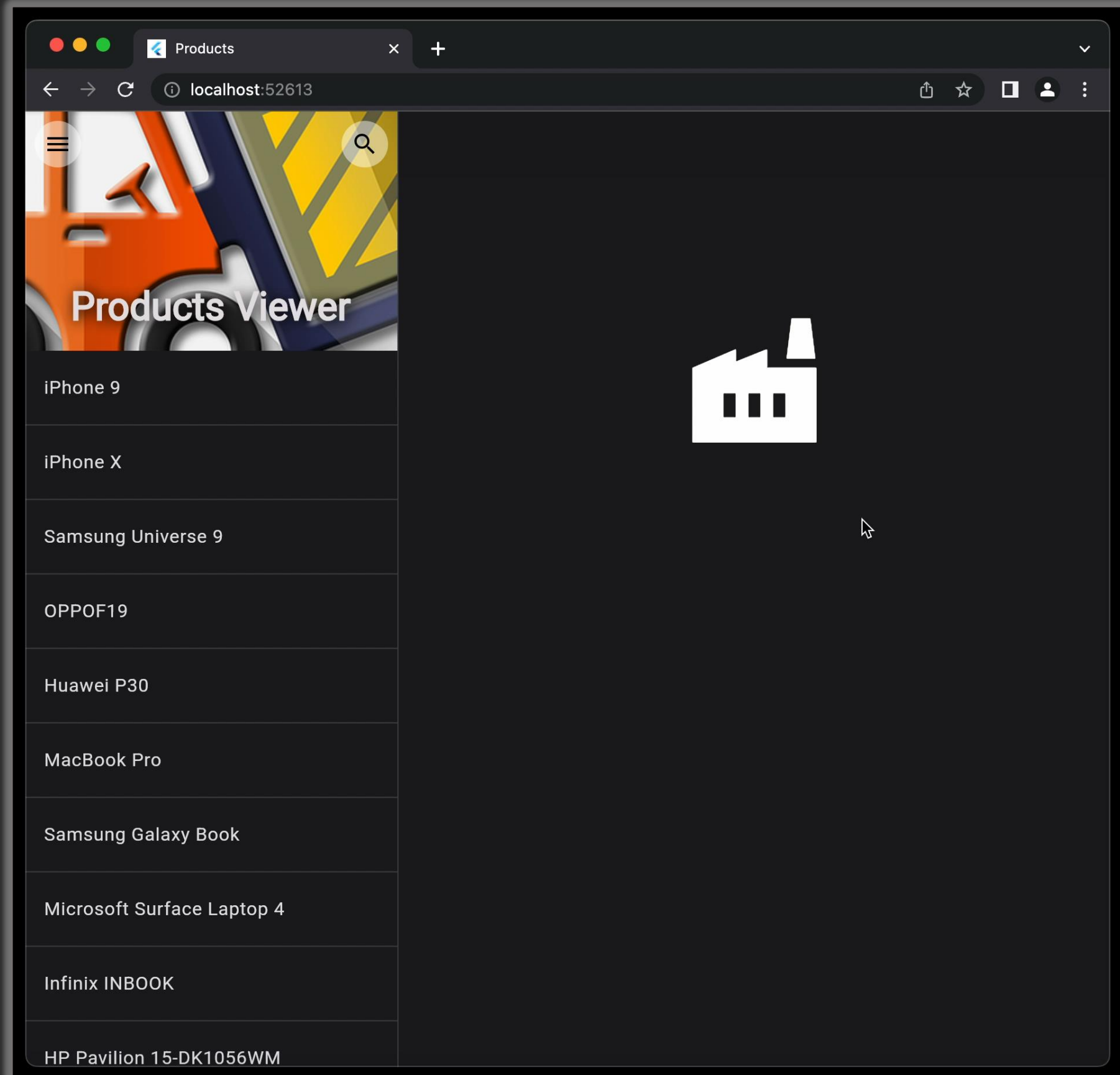
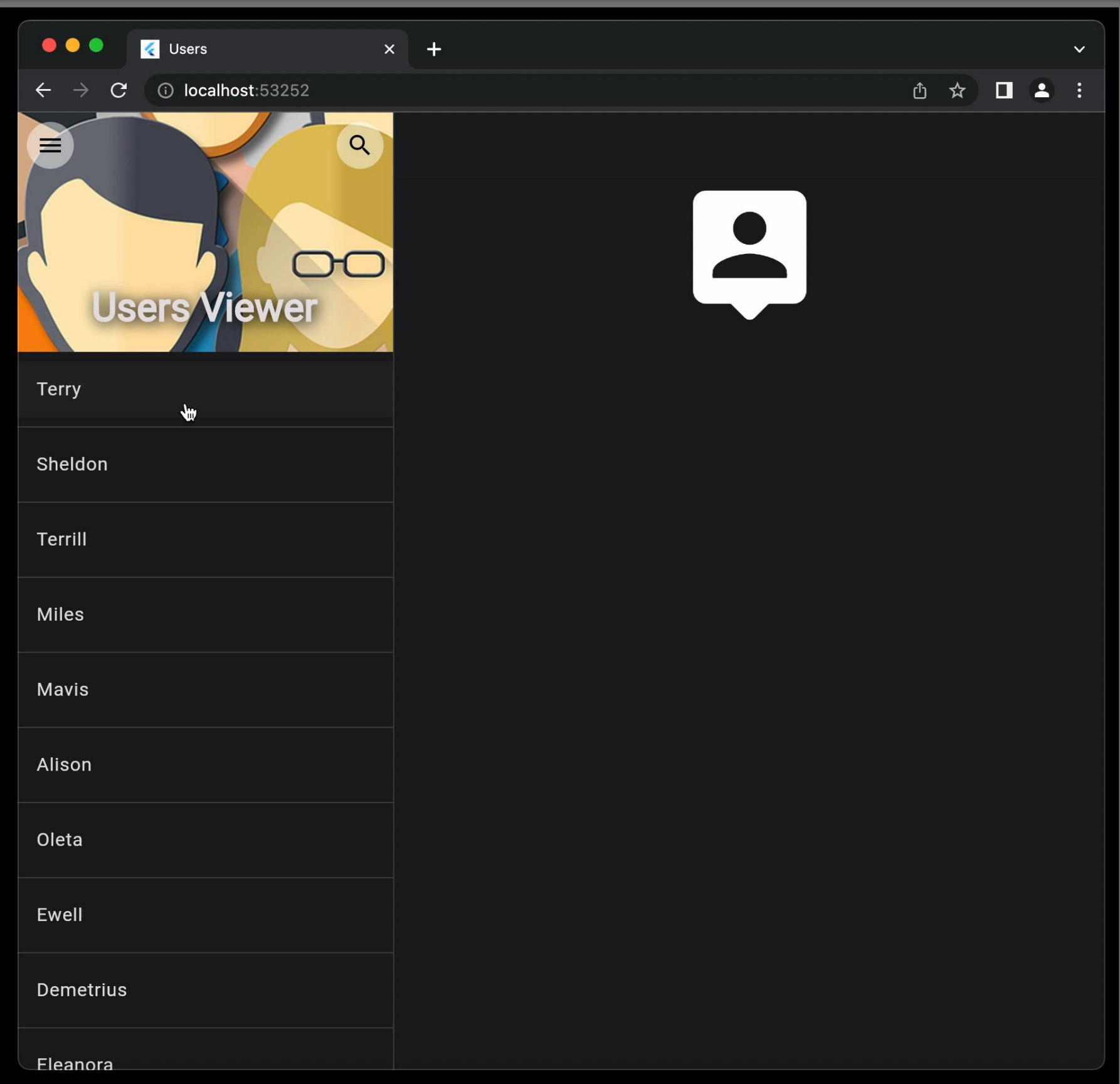
Phone Navigation



Tablet Split-Screen Navigation



Web - Mobile & Split-Screen Navigation



‘Shared’ Package Importing & Reviewing the ‘Shared’ Single Codebase Package

Next

‘Shared’ Package Importing & Reviewing the ‘Shared’ Single Codebase Package

Overview

- Analyzing Applications Common Features
- Importing Starter Projects
 - Reviewing `pubspec.yaml` plugins
 - `connectivity_plus` plugin
 - `http` plugin
 - Reviewing Constants
 - `helpers/constants` `Responsive Sizes` enum
 - `helpers/constants` `Image Sizes` Class
 - Reviewing Themes Classes
 - `helpers/themes` `Dark and Light` Themes
 - `helpers/themes` `Define Theme Colors`

Overview

- Reviewing Services
 - services/[api_service](#)
 - services/[connection_service](#)
- Reviewing Widgets
 - widgets/[status_message](#)
- Reviewing Root
 - [shared.dart](#) (partial exports)

Get the Starter Projects 'Shared', 'Users', and 'Products'

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

Summary

- You Analyzed Applications Common Features
- You Imported the Starter Projects
 - Reviewed `pubspec.yaml` plugins
 - `connectivity_plus` plugin
 - `http` plugin
 - Reviewed Constants
 - `helpers/constants` Responsive Sizes enum
 - `helpers/constants` Image Sizes Class
 - Reviewed Themes Classes
 - `helpers/themes` Dark and Light Themes
 - `helpers/themes` Define Theme Colors

Summary

- Reviewed Services
 - services/**api_service**
 - services/**connection_service**
- Reviewed Widgets
 - widgets/**status_message**
- Reviewed Root
 - **shared.dart** (partial exports)

‘Shared’ Package Creating Classes and Widgets

Next

‘Shared’ Package Creating Classes and Widgets

Overview

- Creating Classes
 - `search_sticky_header_delegate`
- Creating Widgets
 - `change_metrics_observer`
 - `responsive_layout_builder`
- Modifying `shared` file and adding export for all dart files in package

Live Coding

Summary

- Created Classes
 - `search_sticky_header_delegate`
- Created Widgets
 - `change_metrics_observer`
 - `responsive_layout_builder`
- Modified `shared` file and added export for all dart files in package

‘Users’ Project Opening & Reviewing

Next

'Users' Project Opening & Reviewing

Overview

- Reviewing **pubspec** dependencies
 - Reviewing local 'Shared' package
 - Reviewing assets/**images/**
- Reviewing the Imported 'Users' Starter Project
 - **main**
 - helpers/**api_url**
 - models/**user_model**

Live Coding Review

Summary

- Reviewed **pubspec** dependencies
 - Reviewed local **'Shared'** package
 - Reviewed **assets/images/**
- Reviewed the Imported **'Users'** Starter Project
 - **main**
 - helpers/**api_url**
 - models/**user_model**

‘Users’ Project Creating Services & Pages

Next

'Users' Project

Creating Services & Pages

Overview

- Creating Services
 - services/**user_service**
- Creating Pages
 - pages/**user_viewer**
 - pages/**user_list**
 - pages/**user_detail**
 - Single **Network Image Viewer**
 - pages/**user_list_detail_split_screen**

Live Coding

Summary

- Created Services
 - services/**user_service**
- Created Pages
 - pages/**user_viewer**
 - pages/**user_list**
 - pages/**user_detail**
 - Single **Network Image Viewer**
 - pages/**user_list_detail_split_screen**

‘Products’ Project Opening & Reviewing

Next

‘Products’ Project Opening & Reviewing

Overview

- Reviewing **pubspec** dependencies
 - Reviewing local **'Shared'** package
 - Reviewing **assets/images/**
- Reviewing the Imported **'Products'** Starter Project
 - **main**
 - helpers/**api_url**
 - models/**product_model**

Live Coding Review

Summary

- Reviewed **pubspec** dependencies
 - Reviewed local **'Shared'** package
 - Reviewed **assets/images/**
- Reviewed the Imported **'Products'** Starter Project
 - **main**
 - helpers/**api_url**
 - models/**product_model**

‘Products’ Project Creating Services & Pages

Next

‘Products’ Project

Creating Services & Pages

Overview

- Creating Services
 - services/**product_service**
- Creating Pages
 - pages/**product_viewer**
 - pages/**product_list**
 - pages/**product_detail**
 - Horizontal Scrolling List of **Network Images**
 - Show Optional **Change Metrics Observer** Uses
 - pages/**product_list_detail_split_screen**

Live Coding

Summary

- Created Services
 - services/product_service
- Created Pages
 - pages/product_viewer
 - pages/product_list
 - pages/product_detail
 - Horizontal Scrolling List of Network Images
 - Show Optional Change Metrics Observer Uses
 - pages/product_list_detail_split_screen

Course Summary

Next

‘Shared’, ‘Users’, ‘Products’ Summary

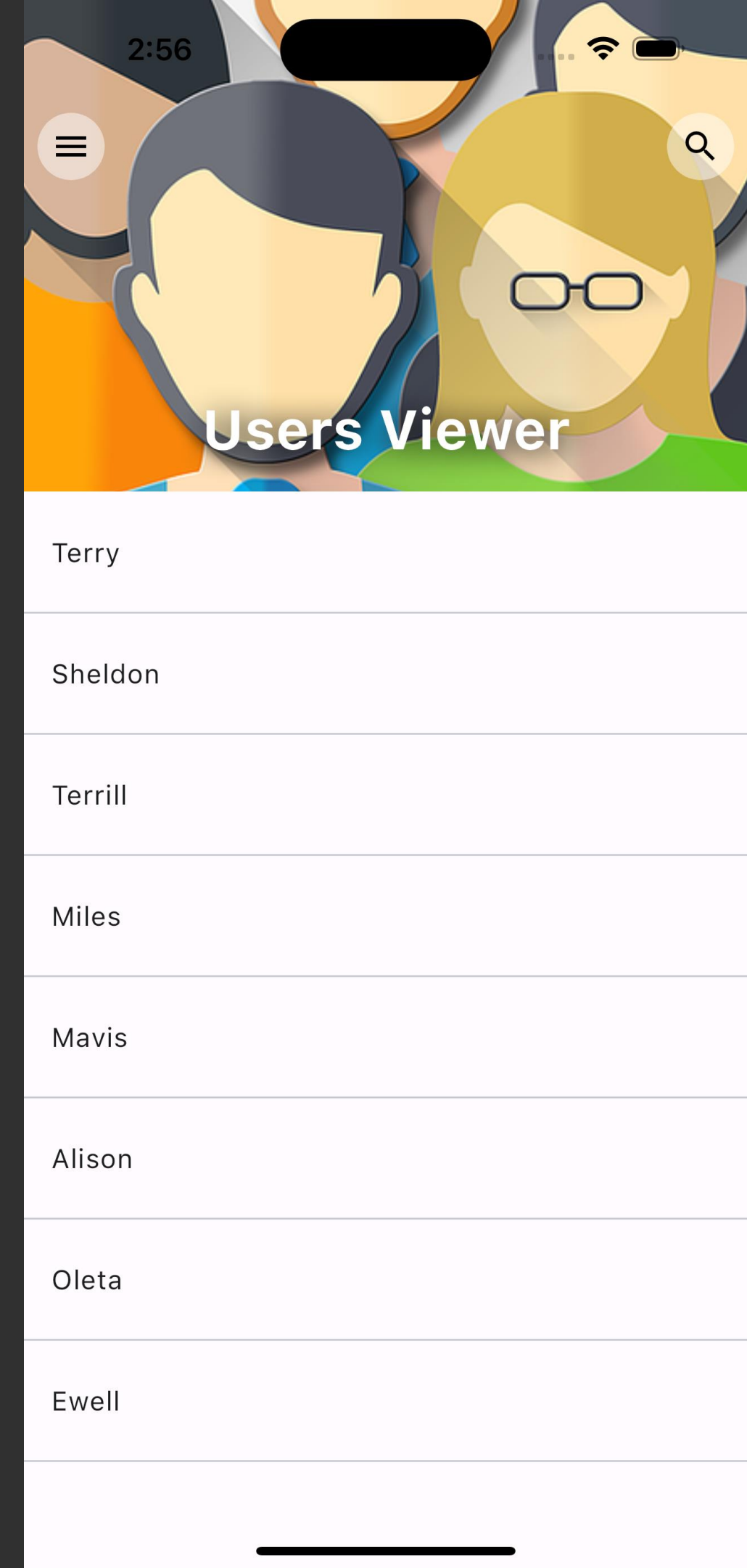
Summary – Tasks & Goals

Created multiple Flutter projects for Phone, Tablet, and Web with the ability to share common reusable codebase

Created three projects, a single shared codebase package, and two separate Phone, Tablet, and Web apps creating patterns for an enterprise large-scale scenarios.

Analyzed app's common features, and created a single shared codebase package containing logic and reusable widgets.

Phone apps navigate list & details on different pages. Tablet, and Web split-screen with list & details on the same page .



Summary - Course Demo App's

First – Created app's common features for shared codebase package containing reusable logic, and widgets.

Next – Created Users project for Mobile, Tablet & Web accessing shared codebase. Mobile apps navigate from list to details on different pages. Tablet, and Web use split-screen layout with list & details on the same page.

Furthermore - Implemented responsive design, dark & light mode, and call RESTful API. **Moving on**, implemented search capabilities.

Lastly – Created Product's project w/ same features as Users.



iPhone 9

iPhone X

Samsung Universe 9

OPPO F19

Huawei P30

MacBook Pro

Samsung Galaxy Book

Microsoft Surface Laptop 4



Thank You



Marco Napoli

X @JediPixels

YouTube @JediPixels

LinkedIn In/marco-napoli-jedipixels