

Flutter Split-Screen Responsive Design

for Phone, Tablet, Desktop, and Web



Marco Napoli

X @JediPixels

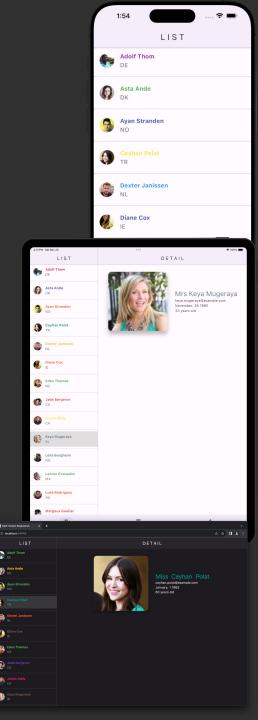
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in In/marco-napoli-jedipixels



Overview: Tasks and Goals

- Create a responsive app supporting a Split-Screen List/Detail layout from a single code base supporting multi-platform phone, tablet, desktop, and web.
- Split-Screen List/Detail on the same screen depending on device, and navigation from List to Detail page on phones.
- Desktop and Web requires to handle both mobile, desktop, and web responsive layout when user changes the size of the app's screen.
- Guess what? No third-party plugins or packages needed.

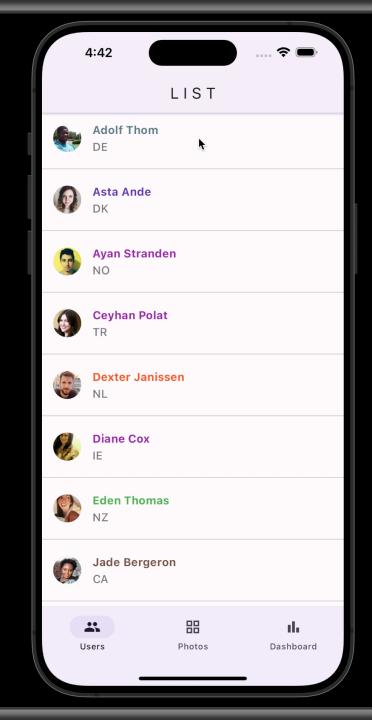


Overview: App's Demo

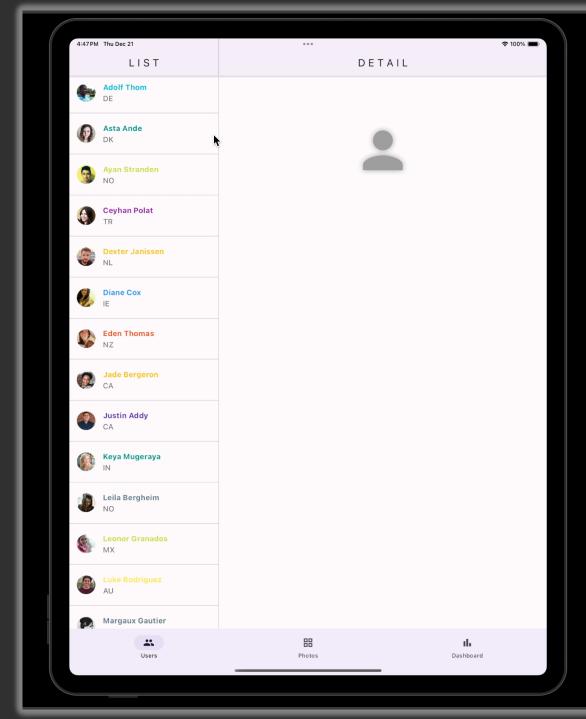
- You'll start by analyzing the app's common features, reusable logic, and widgets.
- You'll implement Dark and Light Mode, global State Management, and Responsive Layout Builder widget.
- Phone app navigates from the List page to the Details page.
- Tablet, Desktop, and Web app, you'll create a Split-Screen layout showing the List and Detail pages on the same screen.



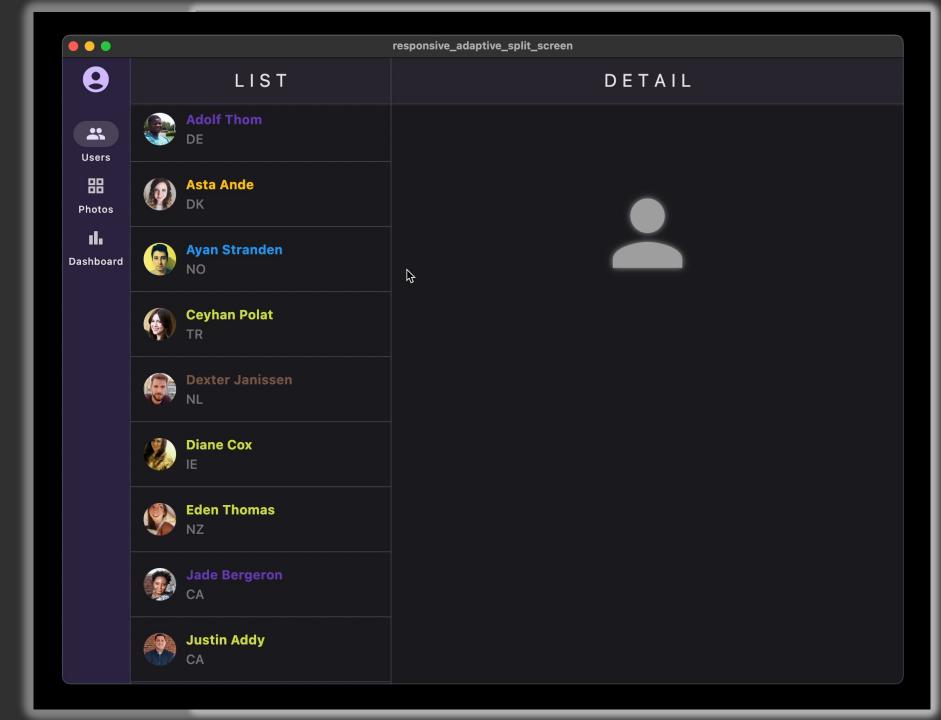
iPhone



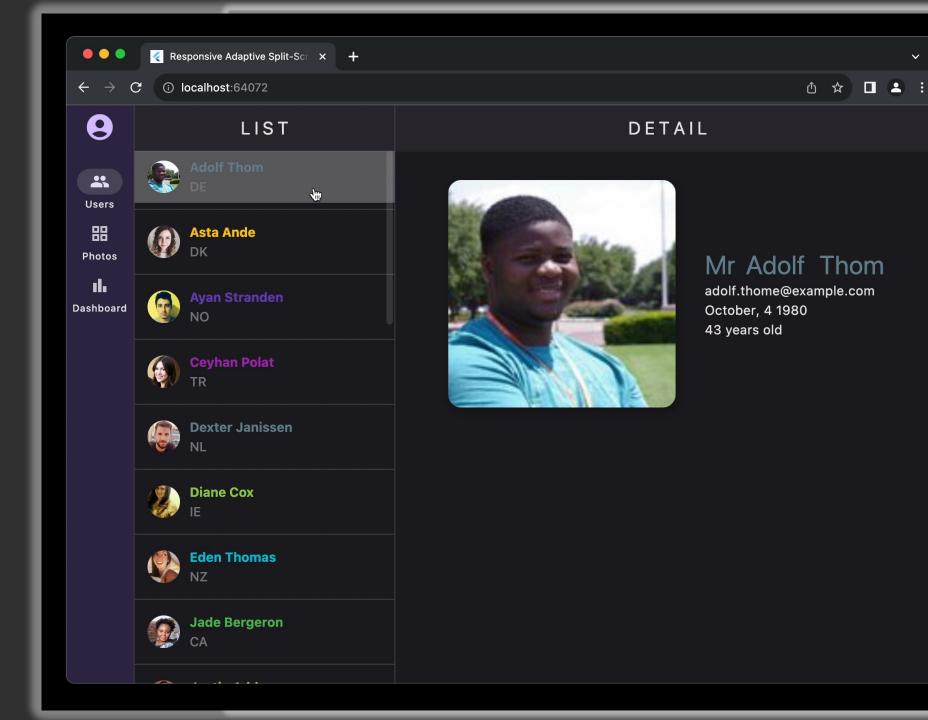
iPad



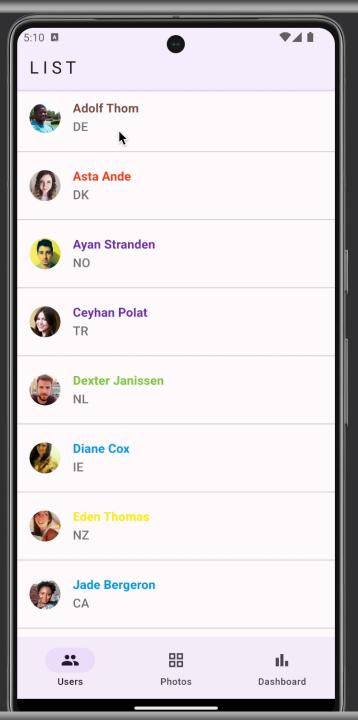
macOS



Web



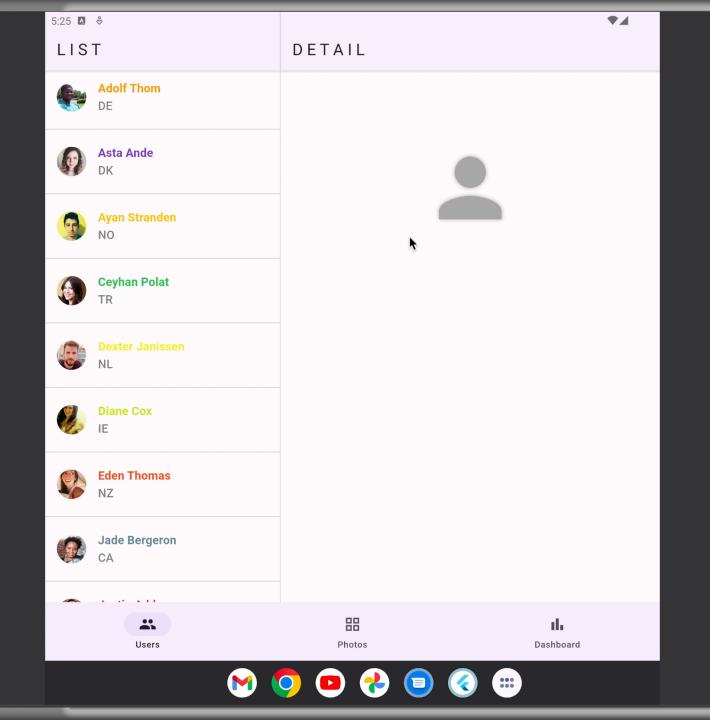
Pixel 7





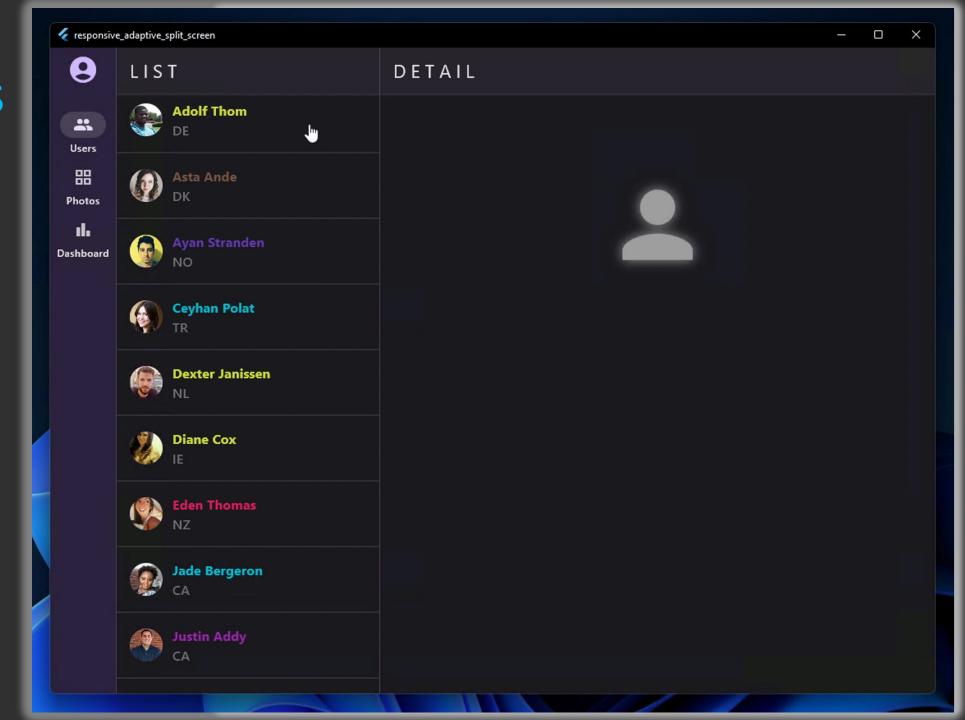
1:1

Fold-Out 8 (foldable)



1:1

Windows



Base Structure: Opening and Reviewing the Starter Project

Next







Base Structure: Opening and Reviewing the Starter Project

Helpers and Models



Overview: Helpers and Models

- Analyzing App's Common Features
- Importing Starter Project
 - Reviewing Root
 - main page
 - Reviewing Helpers
 - helpers/constants
 - helpers/formatters
 - helpers/nav_transition
 - helpers/themes
 - Reviewing Models
 - models/user_model



Get the Starter Project Next

Import starter project from source_code/split_screen_responsive_starter directory provided in Resources of this course



Summary: Helpers and Models

- Analyzed App's Common Features
- Imported Starter Project
 - Reviewed Root
 - main page
 - Reviewed Helpers
 - helpers/constants
 - helpers/formatters
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 - Reviewed Models
 - models/user_model



Base Structure: Reviewing the Starter Project State and Widgets

Next







Base Structure: Reviewing the Starter Project

State and Widgets



Overview: State and Widgets

- Analyzing App's Common Features
- Reviewing State
 - state/app_state
 - state/app_state_notifier
- Reviewing Widgets
 - widgets/app_bar_elevated
 - widgets/graph_bar
 - widgets/nav_bar
 - widgets/nav_rail
 - widgets/title_gradient_bar



Overview: State and Widgets

- Reviewing macOS -> Runner
 - DebugProfile.entitlements

```
    <key>com.apple.security.network.client</key>
    <true/>
    <key>com.apple.security.network.server</key>
    <true/>
```

- Reviewing Web Index.html
 - Body -> <script>
 - let config = {renderer: "html"}
 engineInitializer.initializeEngine(config).then(function(appRunner) {}



Continue Reviewing Starter Project State and Widgets

Next

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Summary: State and Widgets

- Analyzed App's Common Features
- Reviewed State
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Creating Helpers and Pages

Next





Creating Helpers and Pages



Overview: Helpers and Pages

- Modifying Helpers
 - helpers/constants (partial)
- Creating Pages
 - pages/responsive/split_screen
 - pages/responsive/responsive_layout_builder
 - pages/responsive/desktop_web
 - pages/responsive/mobile_tablet
 - pages/home



Live Coding



Live Demo's

for iPhone, iPad, macOS, Web, Pixel 7, Fold-Out 8, and Windows...



Summary: Helpers and Pages

- Modified Helpers
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Course Summary

Next





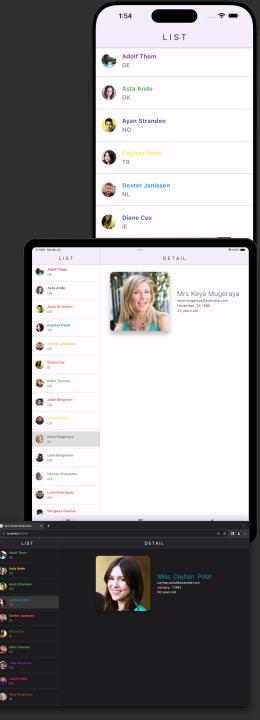
Split-Screen Responsive Design

Course Summary



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Thank You



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