Flutter Split-Screen Responsive Design

for Phone, Tablet, Desktop, and Web

Marco Napoli

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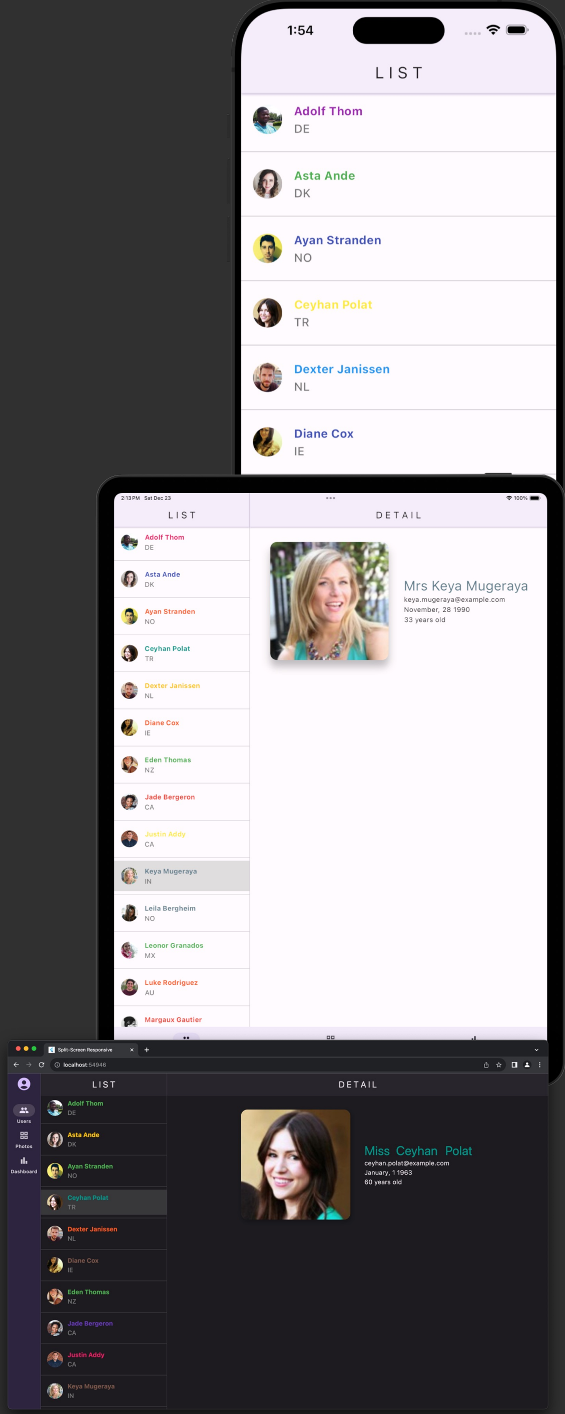
Overview: Tasks and Goals

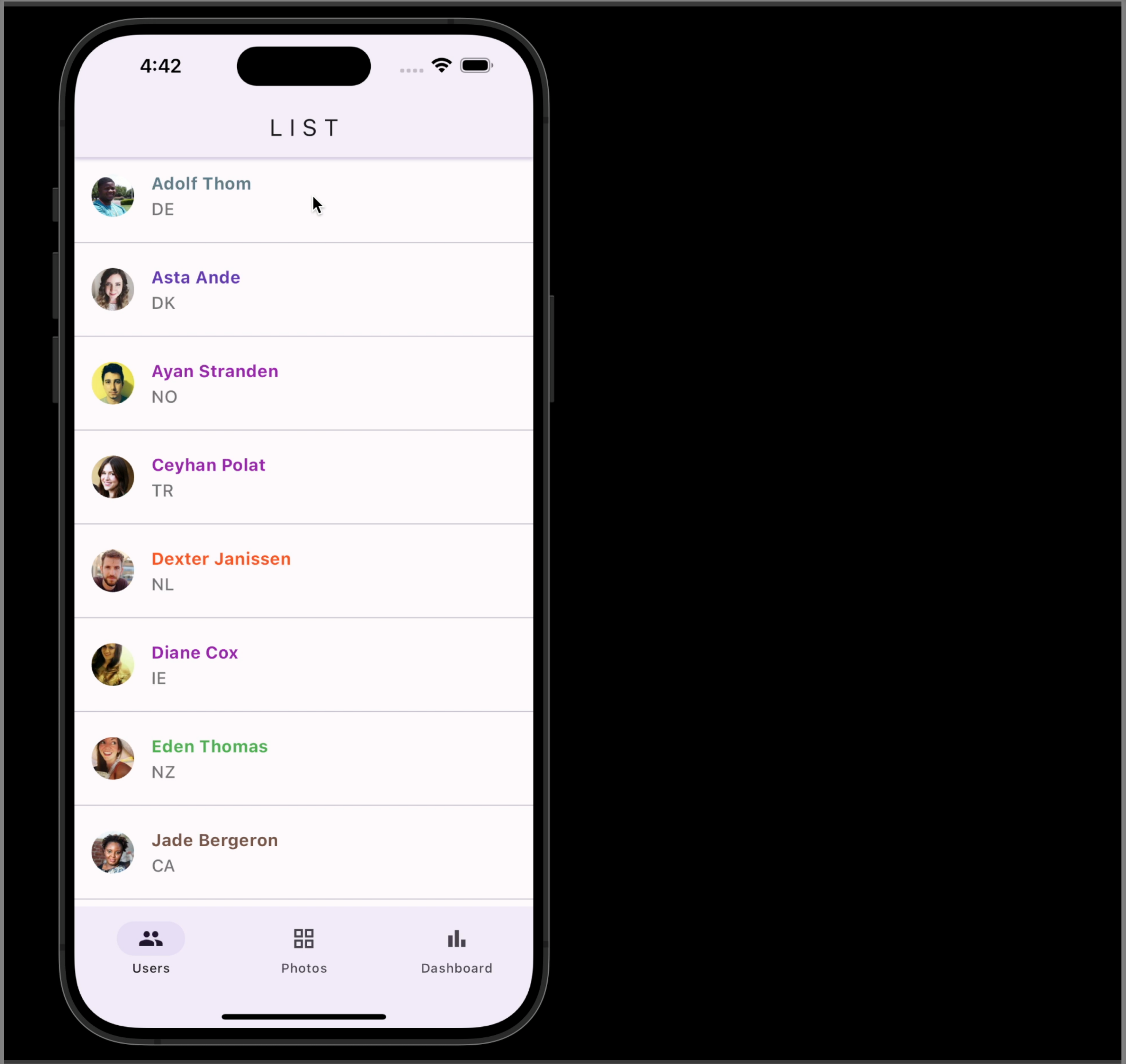
- Create a responsive app supporting a Split-Screen List/Detail layout from a single code base supporting multi-platform phone, tablet, desktop, and web.
- Split-Screen List/Detail on the same screen depending on device, and navigation from List to Detail page on phones.
- Desktop and Web requires to 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



4:42

LIST

Adolf Thom
DE

Asta Ande
DK

Ayan Stranden
NO

Ceyhan Polat
TR

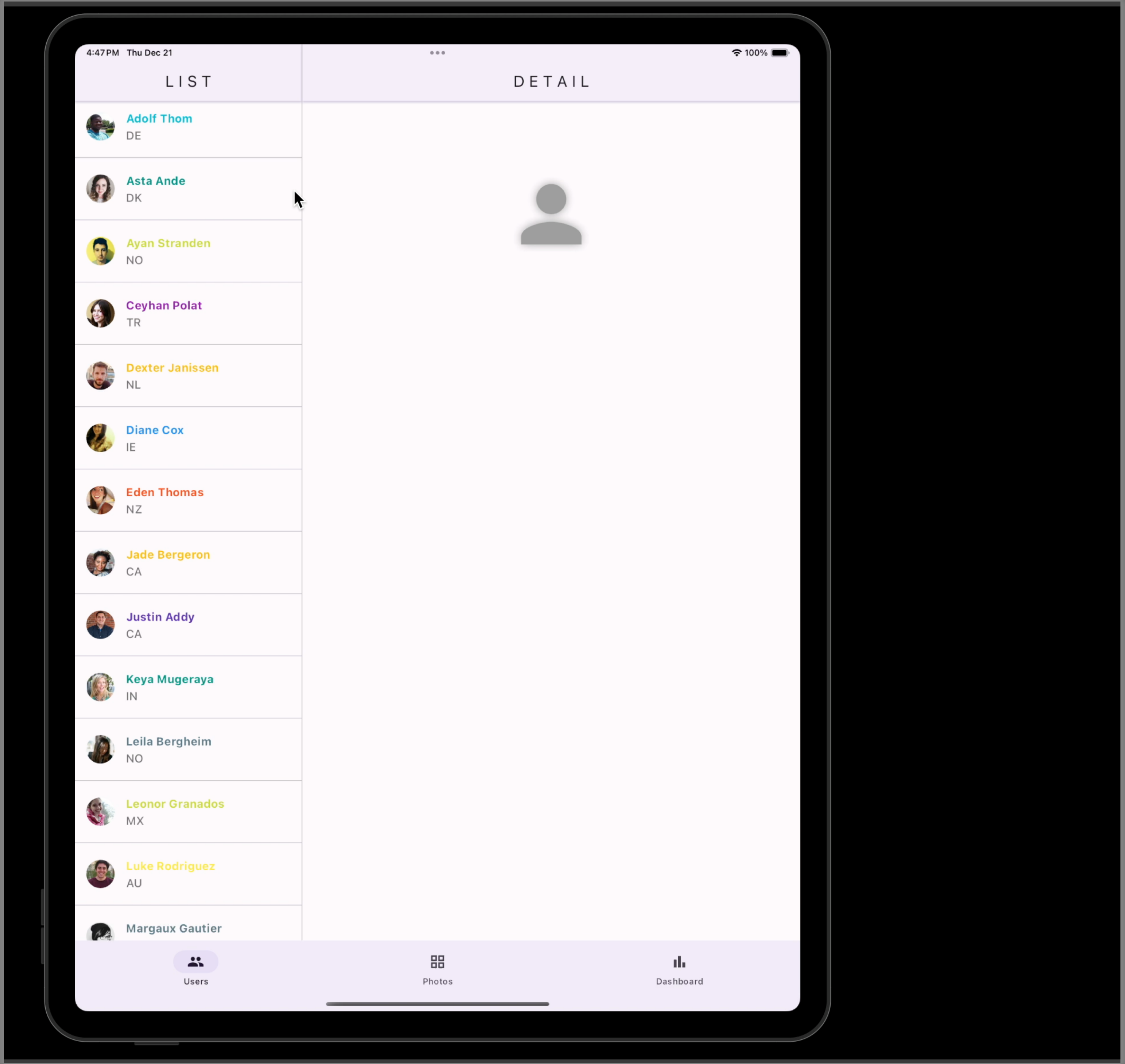
Dexter Janissen
NL

Diane Cox
IE

Eden Thomas
NZ

Jade Bergeron
CA

iPad



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LIST

DETAIL

Adolf Thom
DE

Asta Ande
DK

Ayan Stranden
NO

Ceyhan Polat
TR

Dexter Janissen
NL

Diane Cox
IE

Eden Thomas
NZ

Jade Bergeron
CA

Justin Addy
CA

Keya Mugeraya
IN

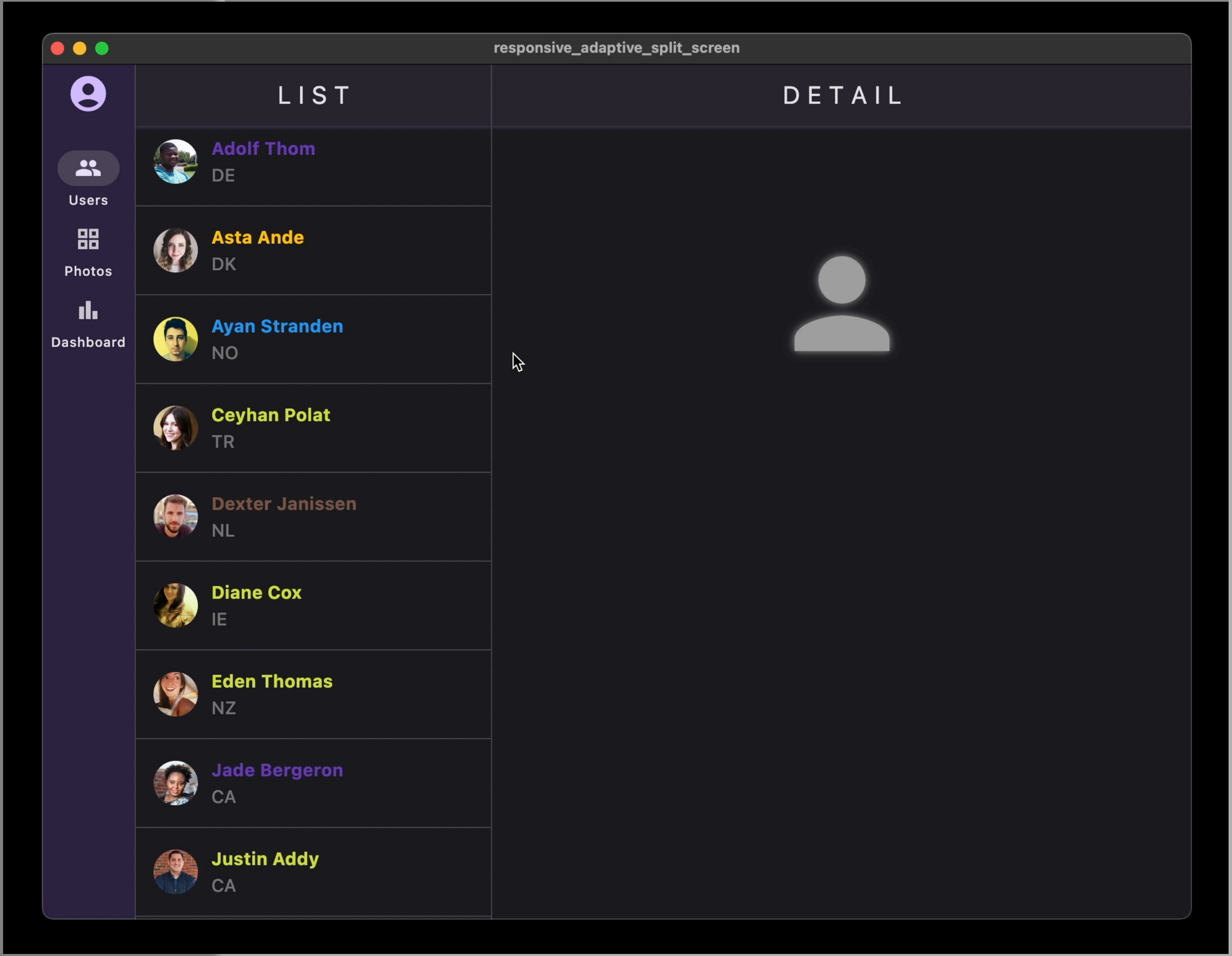
Leila Bergheim
NO

Leonor Granados
MX

Luke Rodriguez
AU

Margaux Gautier

macOS



responsive_adaptive_split_screen

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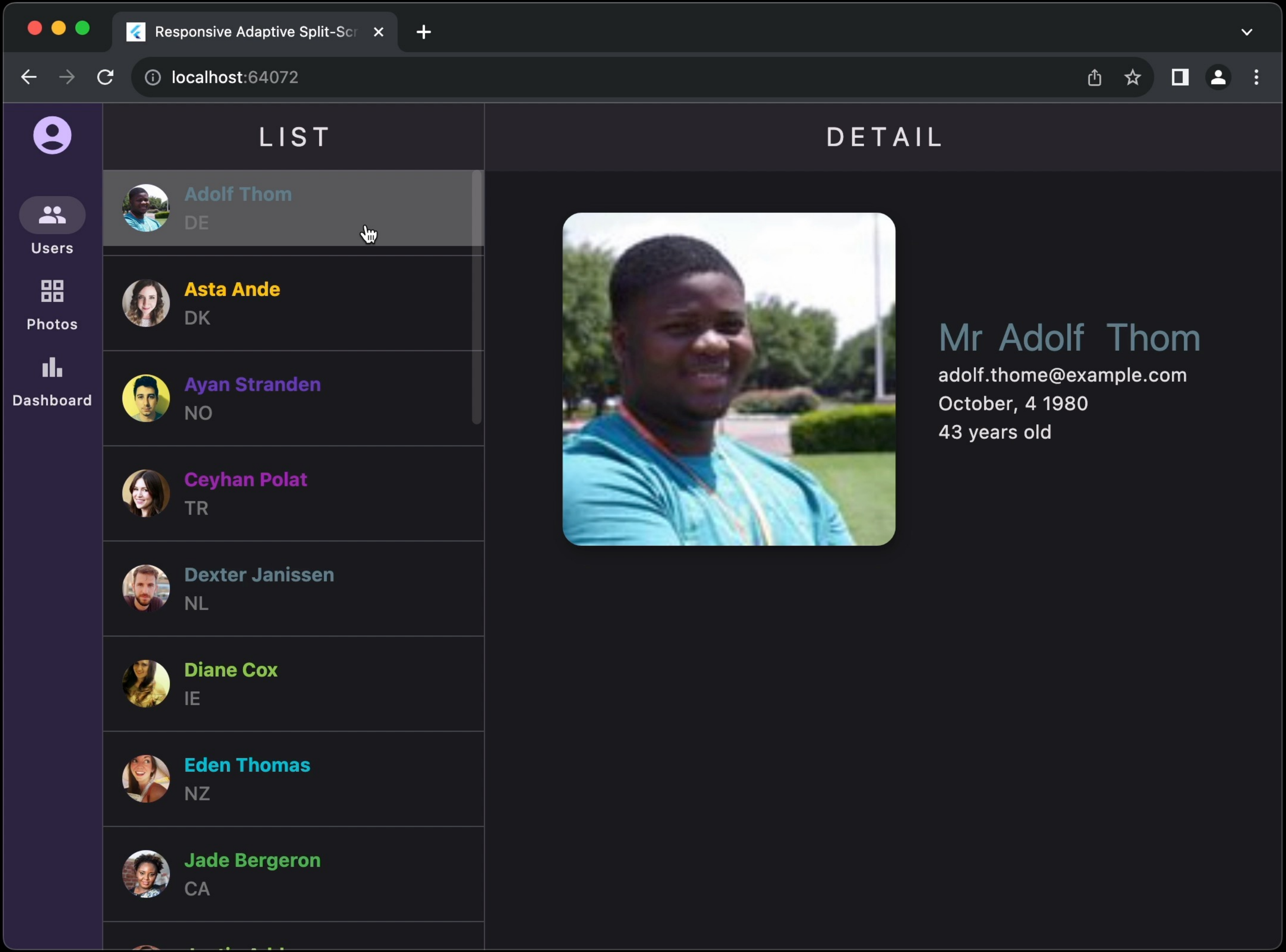
Web



LIST

Adolf Thom	DE
Asta Ande	DK
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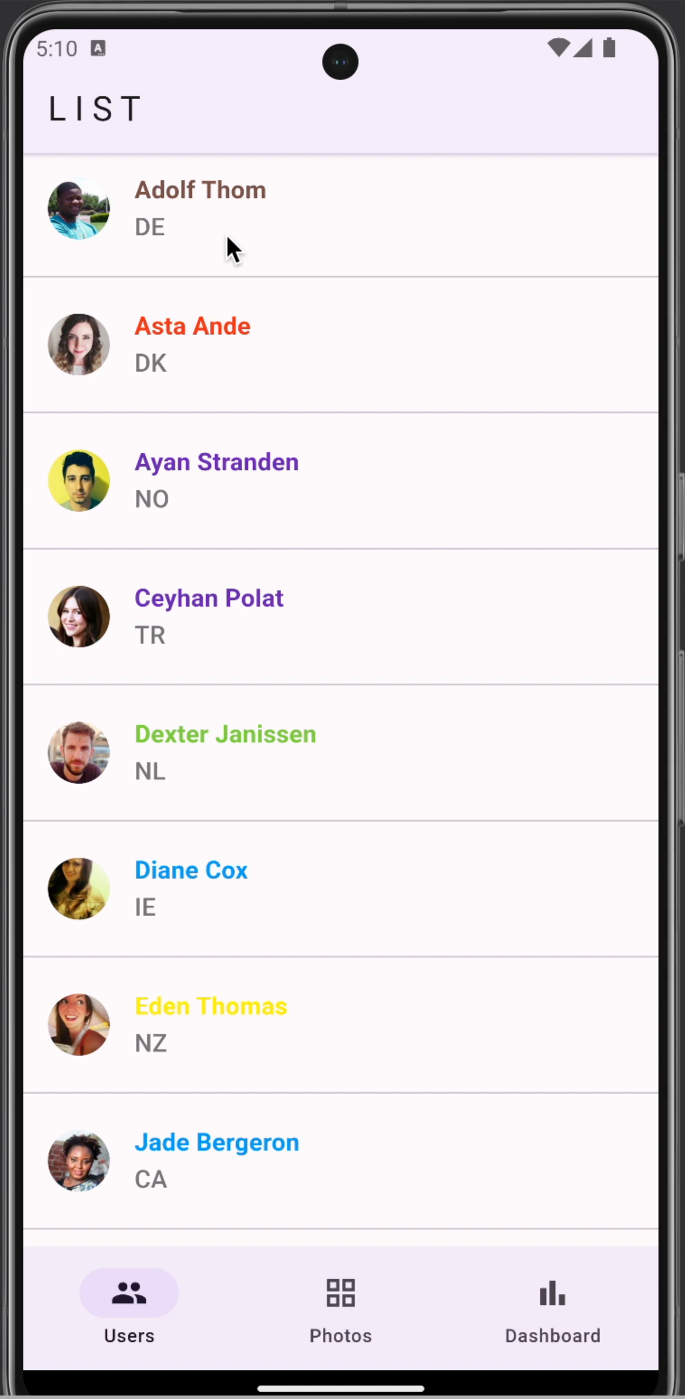
Jade Bergeron	CA

DETAIL

Mr Adolf Thom
adolf.thome@example.com
October, 4 1980
43 years old

Pixel 7



5:10

LIST

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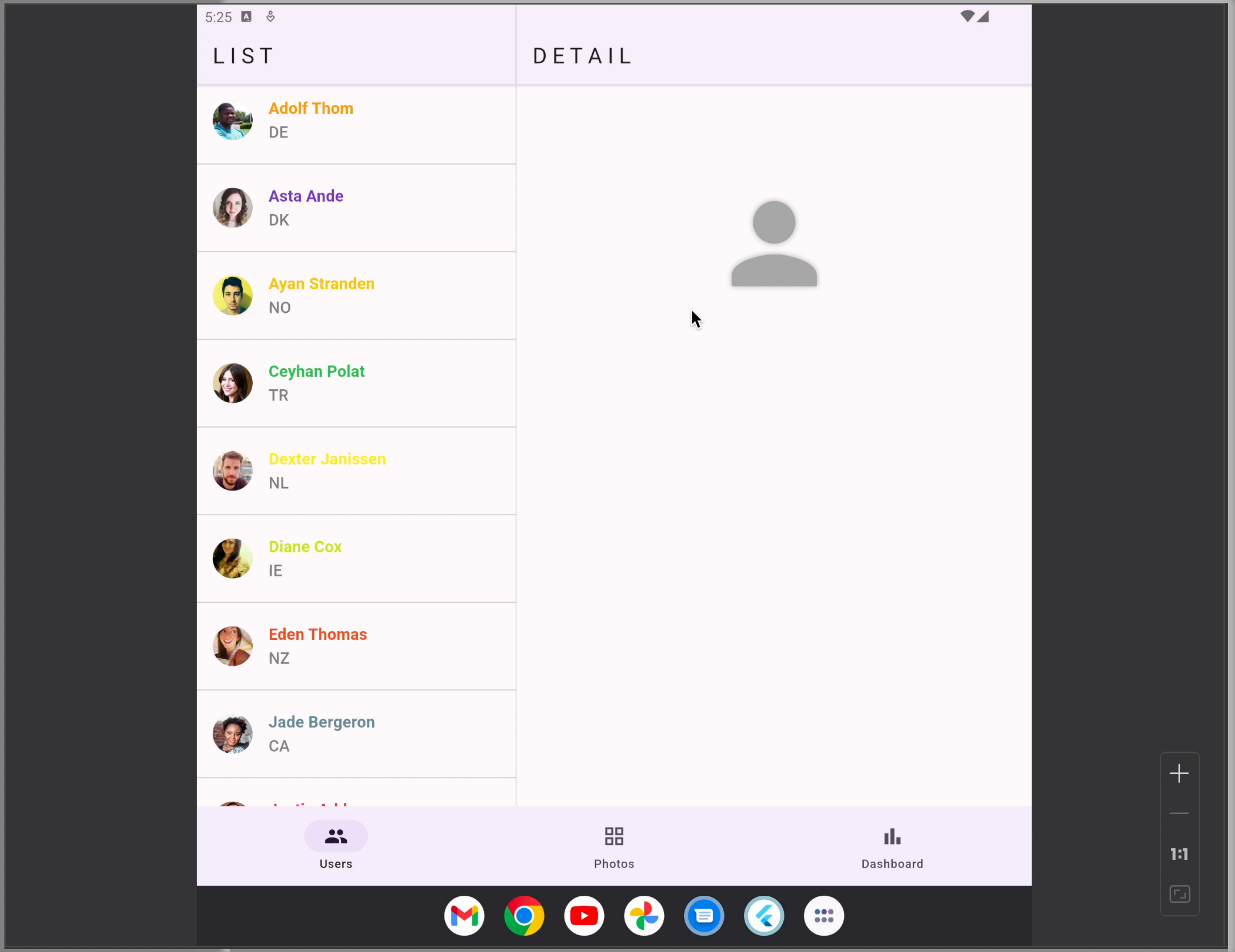
Fold-Out 8 (foldable)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LIST

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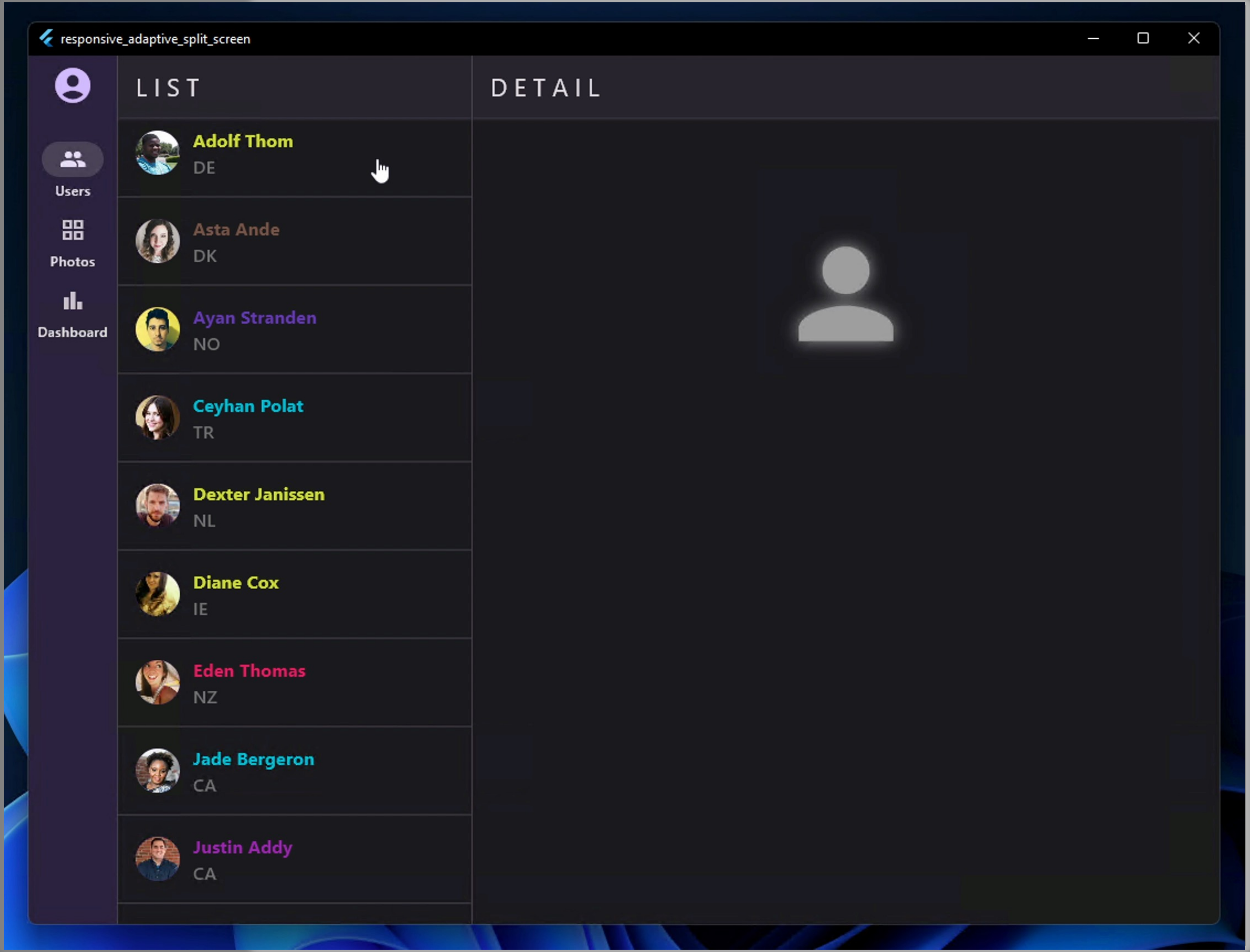
Windows


responsive_adaptive_split_screen

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DETAIL

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

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Get the Starter Project

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

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Summary: Helpers and Models

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

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Base Structure:
Reviewing the Starter Project
State and Widgets

Next

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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) {}

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Continue Reviewing Starter Project State and Widgets

Next

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

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Summary: State and Widgets

- Analyzed App’s Common Features
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  - state/app_state_notifier
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  - widgets/app_bar_elevated
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Summary: State and Widgets

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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

Live Coding

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Live Demo’s

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

Summary: Helpers and Pages

- Modified Helpers
  - helpers/constants (partial)
- Created Pages
  - pages/responsive/split_screen
  - pages/responsive/responsive_layout_builder
  - pages/responsive/desktop_web
  - pages/responsive/mobile_tablet

Course Summary

Next

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Split-Screen Responsive Design

Course Summary

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Course Summary: Tasks and Goals

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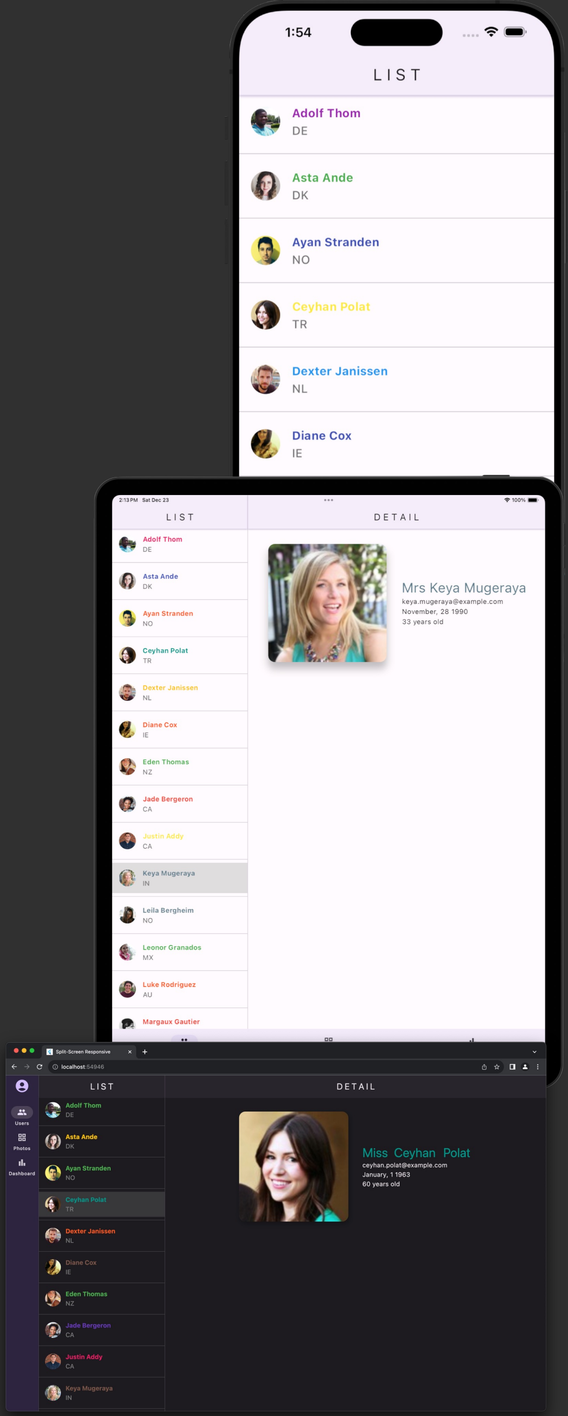

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Thank You

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