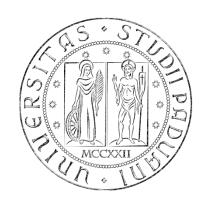
## UNIVERSITY OF PADOVA DEPARTMENT OF INFORMATION ENGINEERING

# Biomedical Wearable Technologies for Healthcare and Wellbeing

# Linking State Management With Networking

A.Y. 2023-2024

Giacomo Cappon

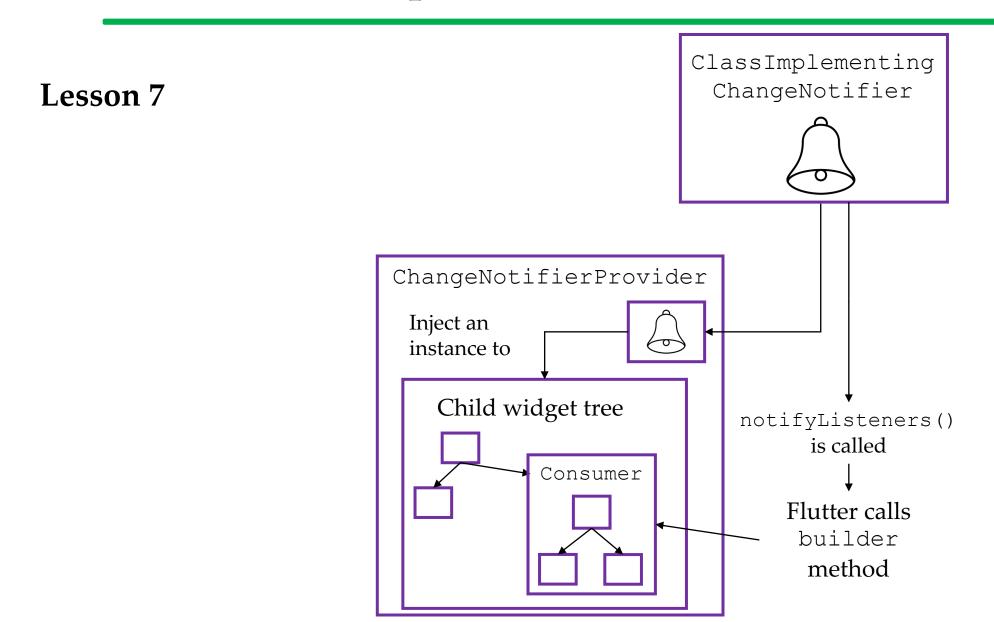




#### Outline

- > Recap
- ➤ Linking state management with networking
- > Exercise

### Recap: Provider (core) flow

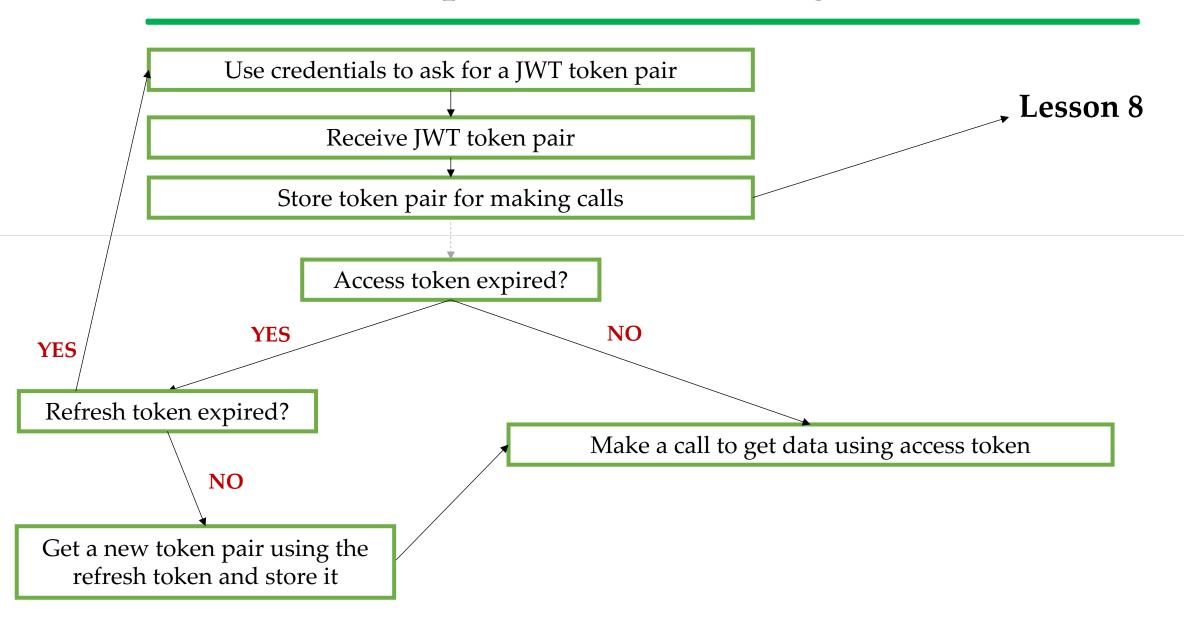


### Recap: Communicating with IMPACT

#### HTTPS requests/responses Lesson 9 Get token (JWT) using credentials (If credentials are ok) Receive token 1010 Ask for specific data using token Flutter (If request is ok) Receive data (JSON format) https://impact.dei.unipd.it/bwthw/ Your app

Lesson 10

#### Recap: The networking flow



#### Outline

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- **▶** Linking state management with networking
- > Exercise

#### Linking state management with networking: simplified schema

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#### **WHERE**

#### **HOW**

"Event" that asks to fetch data

Everywhere in your application

Many options, e.g., using a button, automatically done if something happen...

Create request and get the response

In a class dedicated to communicate with IMPACT

<See lesson 9 and 10>

"Manage" response

In the provider (the class that is extending ChangeNotifier)

<See lesson 9 and 10>

Trigger the builders

In the provider (the class that is extending ChangeNotifier)

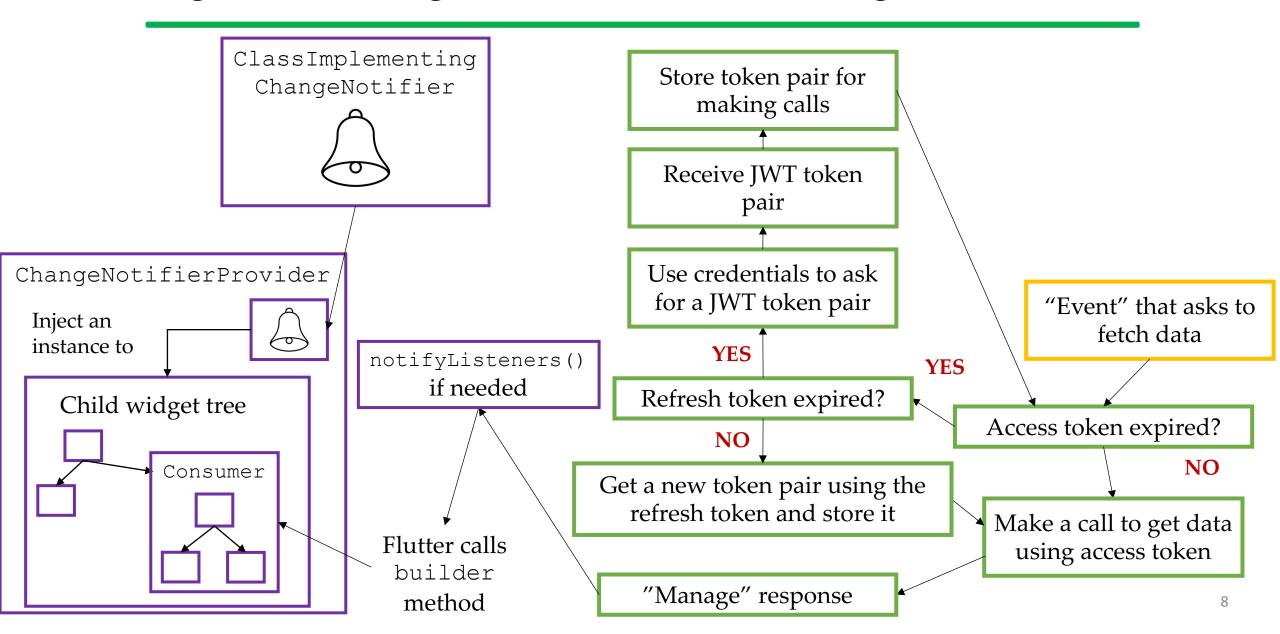
Calling notifyListeners()

Rebuild the UI

Everywhere in your application (where needed)

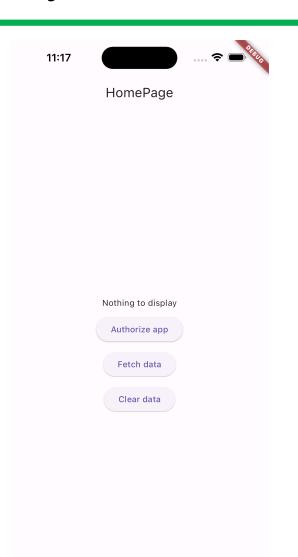
Using Consumer

#### Linking state management with networking: detailed schema



#### Case of study - Live

Let's implement a simple application that, after tapping a button, generates a plot showing yesterday's steps.





#### Outline

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#### Exercise

➤ Get familiar with the example