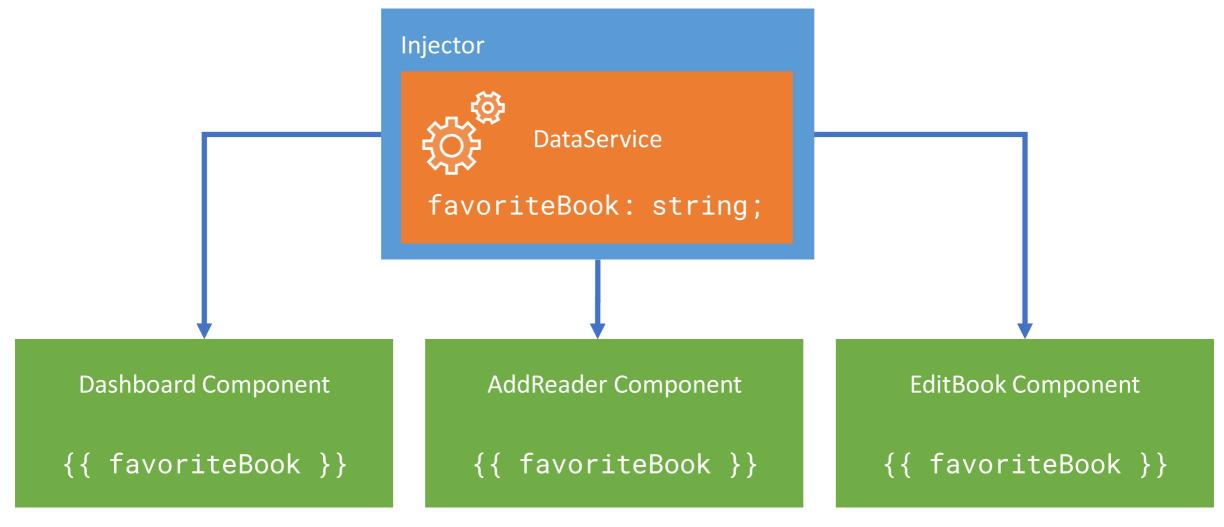
# Angular Hands-on Workshop: Beyond the Basics

State Management

# Sharing State with Services

### Sharing State with Services

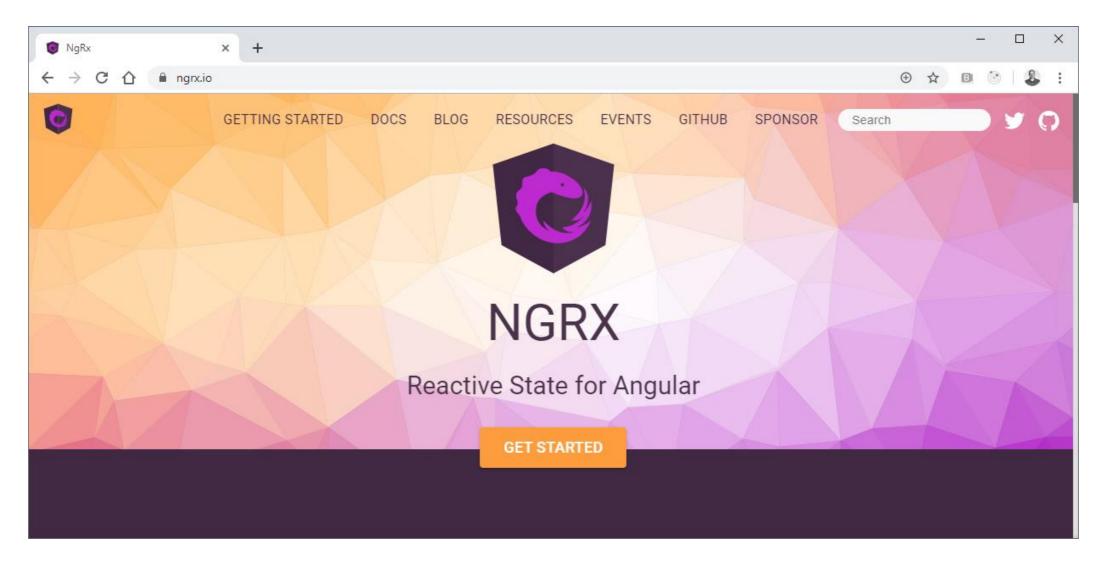


# Managing State with NgRx

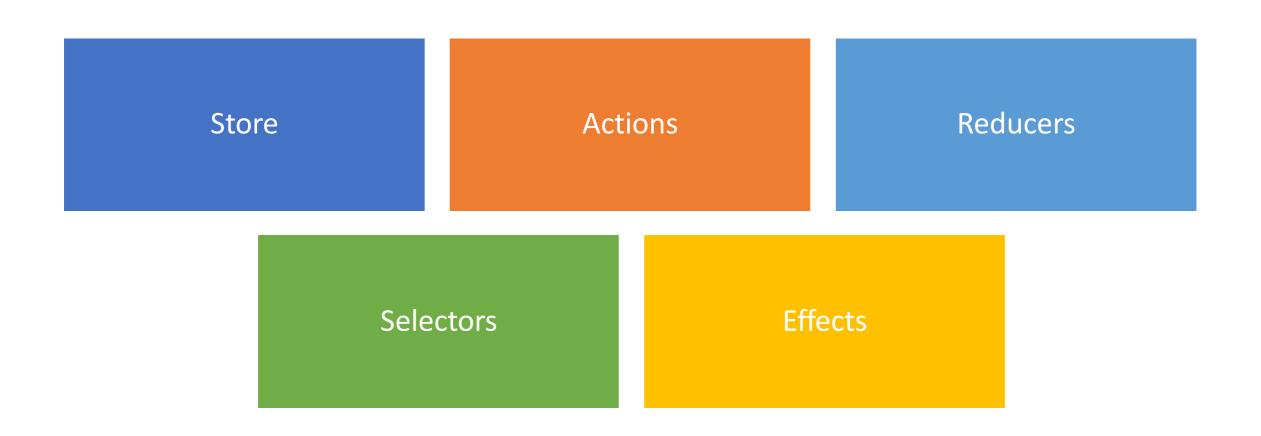
#### What is NgRx?

- Angular library that implements the Redux pattern
  - Single source of truth
  - State is read-only
  - Changes are made with pure functions
- Powered by RxJS
- Maintained independently of Angular

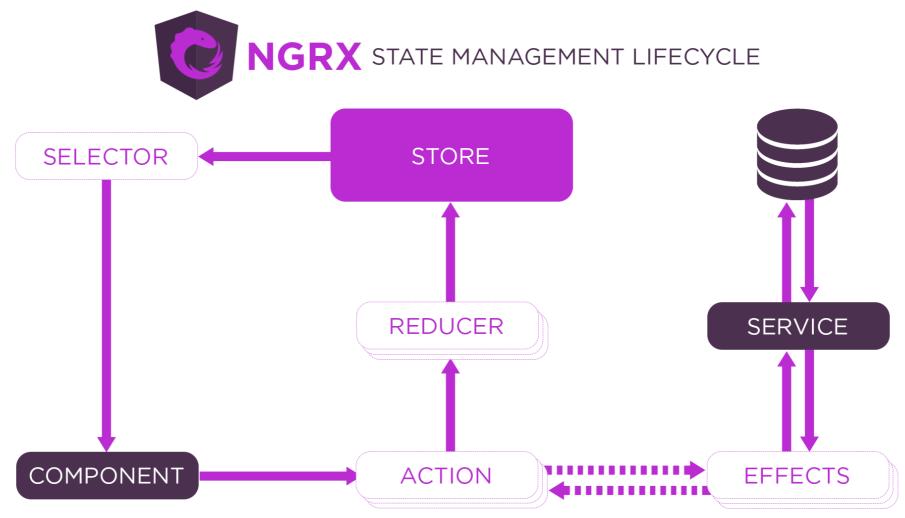
### NgRx Website



### NgRx Building Blocks



### Managing State with NgRx



Source: https://ngrx.io/guide/store#diagram

# When should you use NgRx?

- Medium-large applications
- Apps that store lots of complex objects
- Apps with complex user interactions and multiple data sources
- Apps that become hard to maintain using services for shared state

#### Store

- Immutable JavaScript object
- In-memory only and will be re-initialized if the browser is refreshed
- Highest level properties often reserved for application "features"

#### **Actions**

- Sounds like a function, but is actually an object
- Simple interface with only a "type" property
- May include as many other properties as you need
- Created with the provided "createAction" function

#### Reducers

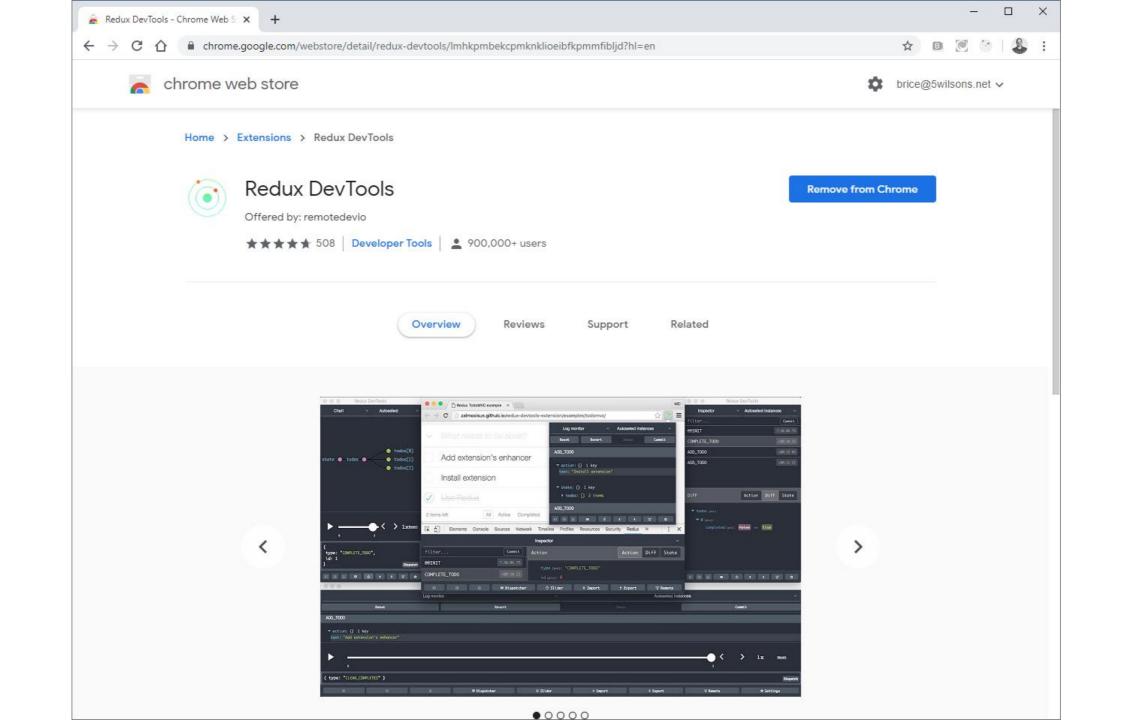
- Process actions to handle state transitions
- Pure functions
- Created with the "createReducer" function

#### Selectors

- Used to retrieve values from the store and subscribe to their changes
- Created with the "createSelector" function

# Demo

Configuring NgRx



## Demo

Configuring Redux DevTools

# Lab

Configuring NgRx

#### State Management

Links to Additional Information

- Official NgRx Website
  - https://ngrx.io/