

# Build Your Own Application System From Scratch

Fullstack FTW

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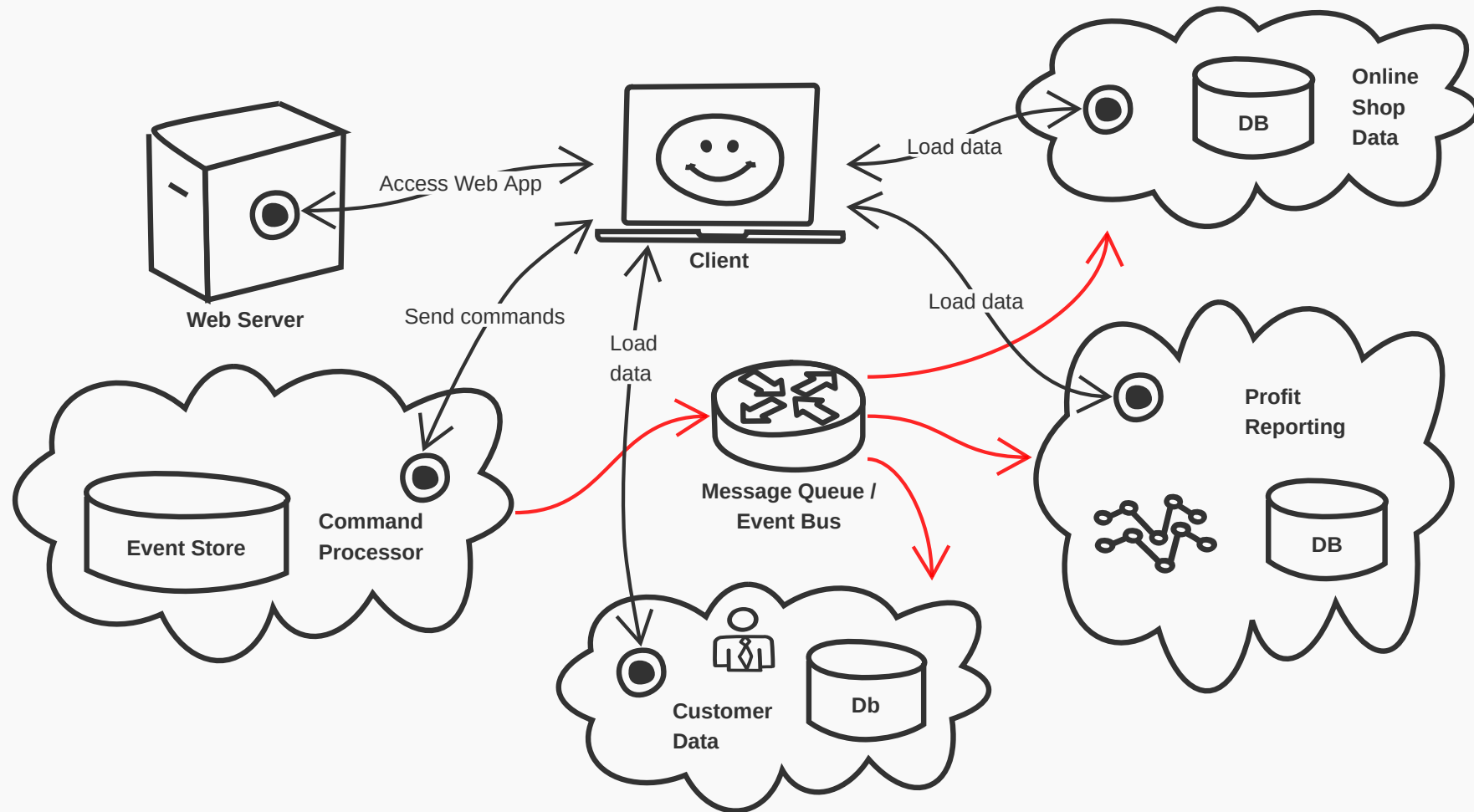
# The Plan

- Create an application system with lots of modern architectural components
  - CQRS/Event Sourcing backend
  - React frontend
  - Cool bidirectional communications
- To fully understand the wheel, it may be necessary to reinvent it

# CQRS / Event Sourcing

- CQRS: Command Query Responsibility Segregation
  - Separate execution paths and data models for commands and queries
- Event Sourcing: Derive all application system state from a central log of events

# CQRS / Event Sourcing



# DEMO

Let's jump in at the deep end...

# Block 1 Workshop - CQRS/ES

Try everything you saw for yourself! A practice task is included at the end of the instructions you find with the starting point project.

- Starting point project: <https://osturm.me/odfs-1-start>
- End point project: <https://osturm.me/odfs-1-end>

# Block 2 Workshop - React

Try everything you saw for yourself! A practice task is included at the end of the instructions you find with the starting point project.

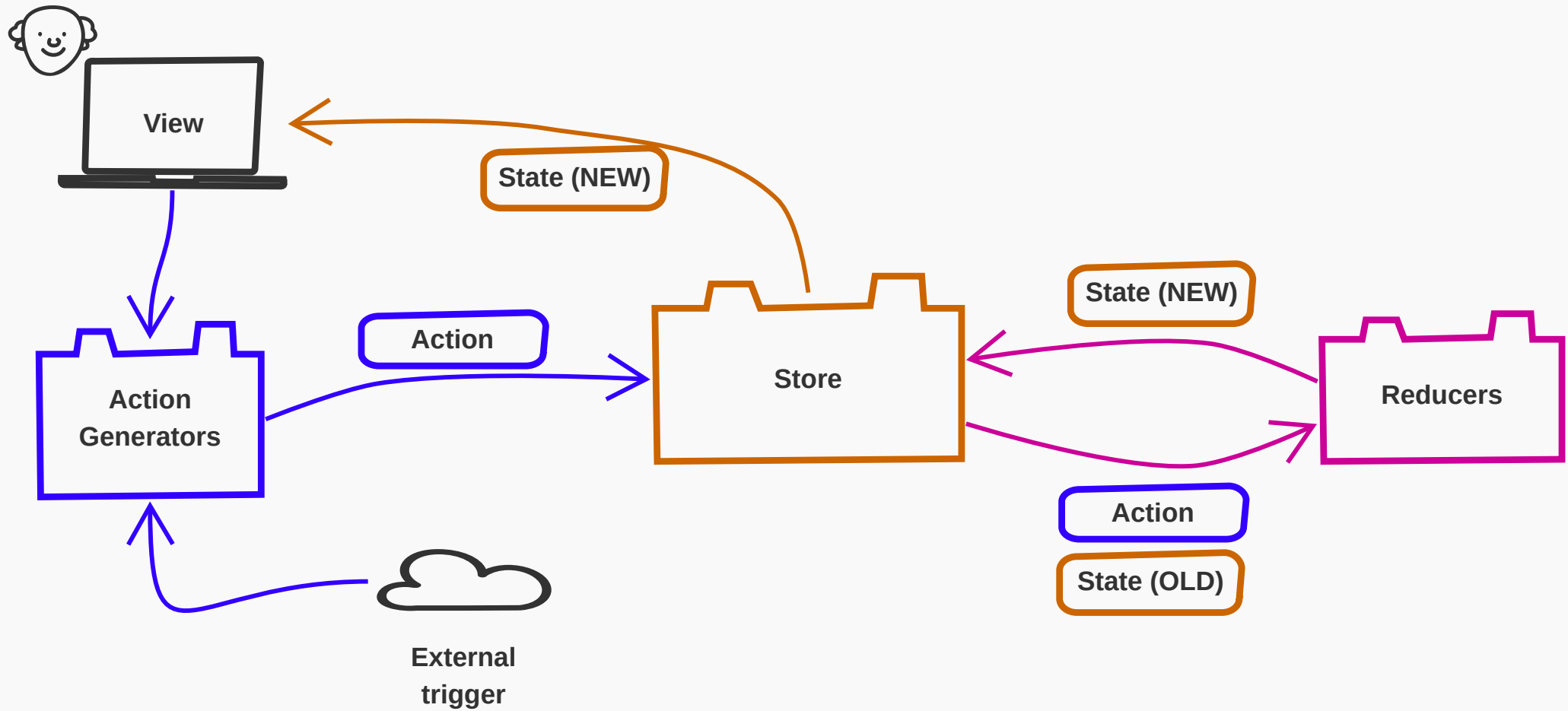
- Starting point project: <https://osturm.me/odfs-2-start>
- End point project: <https://osturm.me/odfs-2-end>



# React - The Missing Parts

- Redux
- Routing
- Interacting with the backend
- Edit form handling

# Redux



**DEMO**

# Block 3 Workshop - React Infrastructure

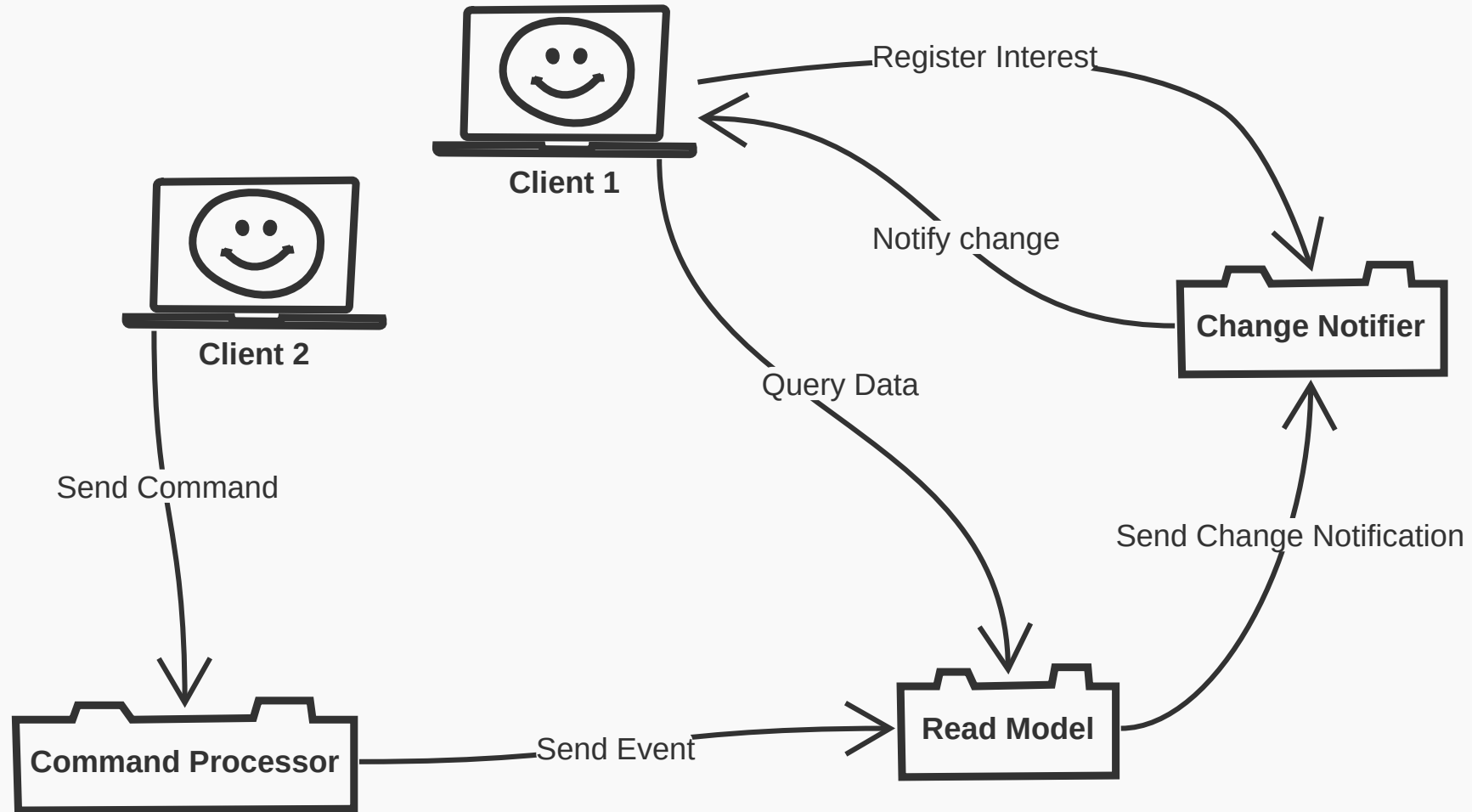
Try everything you saw for yourself! A practice task is included at the end of the instructions you find with the starting point project.

- Starting point project: <https://osturm.me/odfs-3-start>
- End point project: <https://osturm.me/odfs-3-end>

# socket.io

- Bidirectional communication between server and clients
- Flexible transport system -- works everywhere
- Message passing semantics

# Change Notifier Service



**DEMO**

# Block 4 Workshop - Change Notifications

Try everything you saw for yourself! A practice task is included at the end of the instructions you find with the starting point project.

- Starting point project: <https://osturm.me/odfs-4-start>
- End point project: <https://osturm.me/odfs-4-end>



# Sources

- This presentation:
  - <https://oliversturm.github.io/one-day-fullstack-complete>
  - PDF download:  
<https://oliversturm.github.io/one-day-fullstack-complete/slides.pdf>
- Source code: <https://github.com/oliversturm/one-day-fullstack-complete>

# Thank You

Please feel free to contact me about the content anytime.

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