

The background of the slide is a blurred photograph of a group of people in a meeting. In the foreground, a person's hand is visible holding a pen over a notebook with blue sticky notes. The overall scene is brightly lit and out of focus, emphasizing the text in the center.

FRANTIC

**Architecture and state management in web
development**

Me

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- Senior Developer at **Frantic**
- Application development, architecture, consulting

Architecture and state management in web development

Architecture and state management in web development

1. Very brief history of frontend patterns
2. Component
3. Example application
4. Reactive programming

Bonus: State management according to Flux

Very brief history of frontend patterns

Plain html



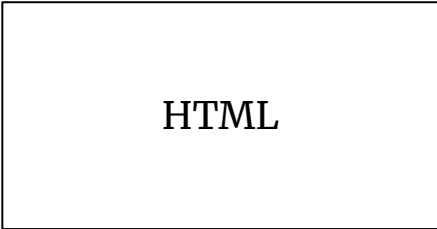
Composed HTML



- data access
- business logic
- representation
- user interaction



browser



Plain html



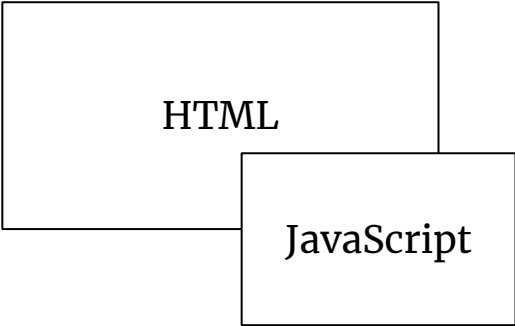
Composed HTML



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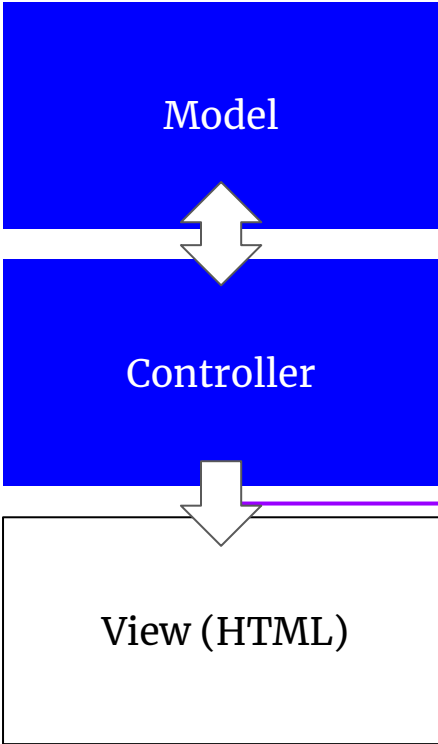


browser



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MVC



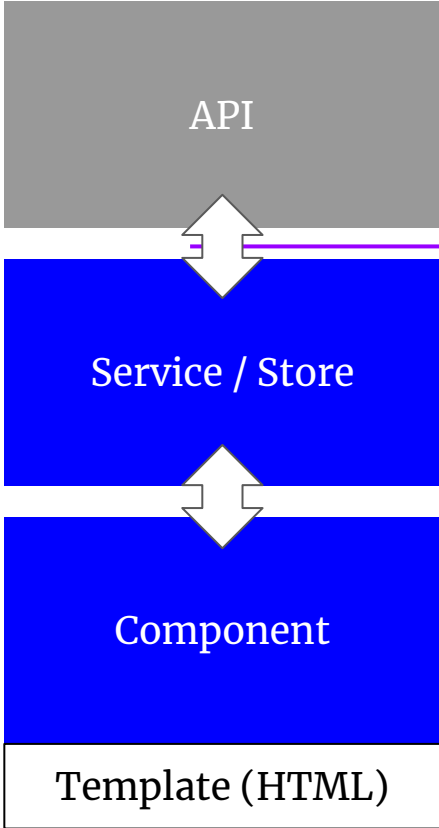
- data access
- business logic

- user interaction

browser

- representation

Components



- data access

browser

- API access
- business logic

- user interaction
- representation

- component interaction

Components

Motivation:

- Increasing interactivity (and complexity) of frontend applications

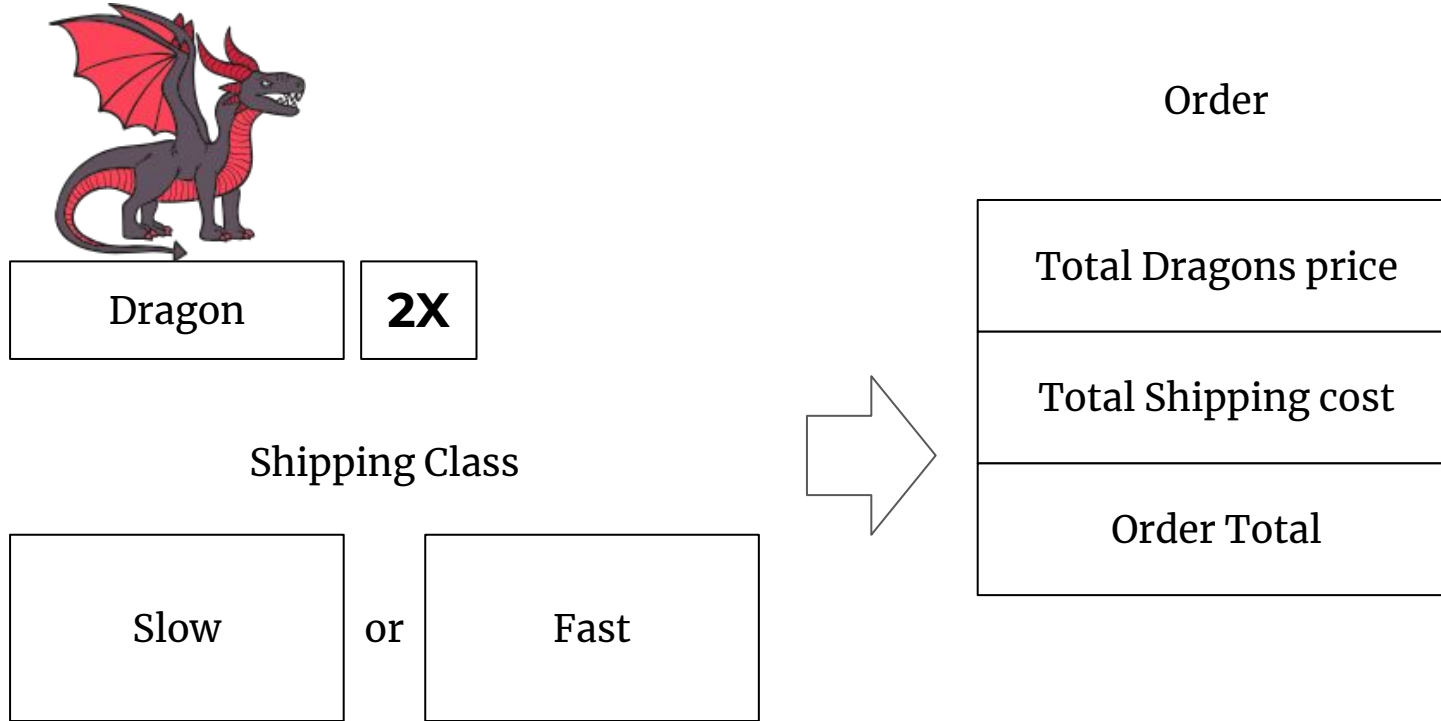
Benefits:

- Independent, modular
- Reusable
- Composable (hierarchy, child/parent components)

Challenges:

- Communication
- State management (timing, race conditions)

Dragon Shop



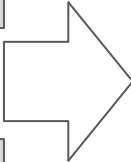
1. You can order one or more dragons
2. Shipping is either slow or fast
3. Shipping cost is queried from a remote API as user updates their selections



Dragons Component

Shipping Class

Shipping Component

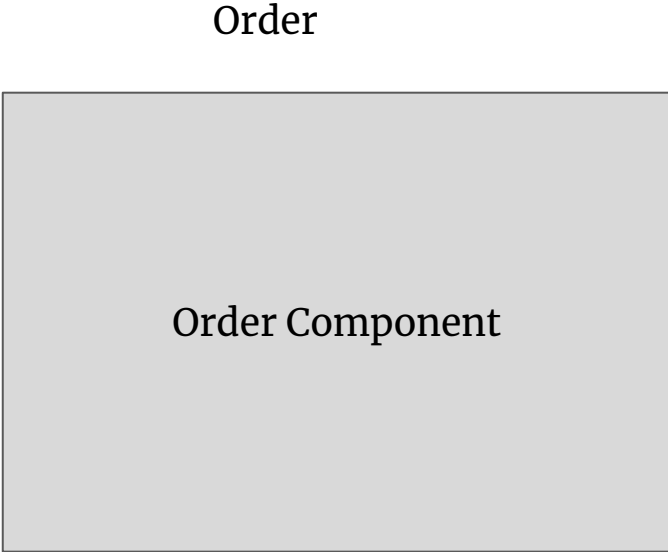
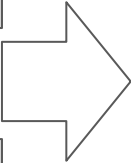


Order

Order Component

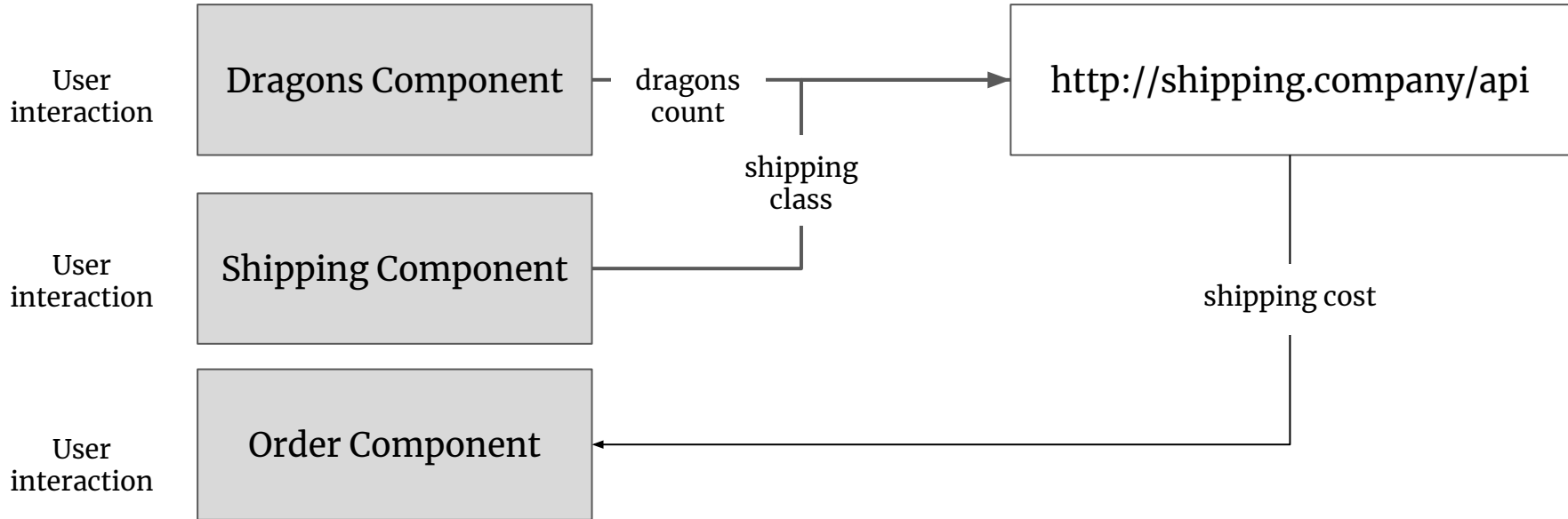


Shipping Class

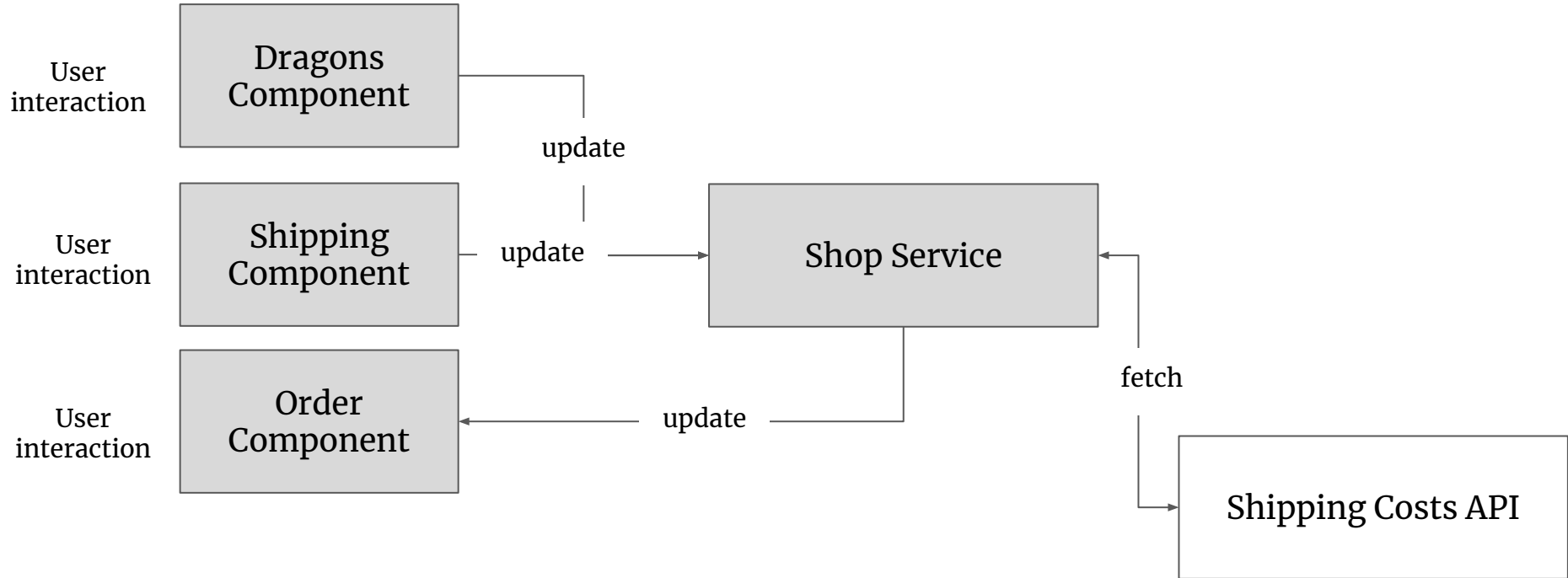


Where to get data?

Application flow



Application flow #2



Dragon Shop CP#1

<https://codepen.io/akseliv/pen/MLgoRQ?editors=0012>

Dragon Shop CP#2

<https://codepen.io/akseliv/pen/xMKrMm?editors=0012>

Observables

<https://codepen.io/akseliv/pen/yZBpVE?editors=0012>

Dragon Shop CP#3

<https://codepen.io/akseliv/pen/MLgOEv?editors=0012>

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