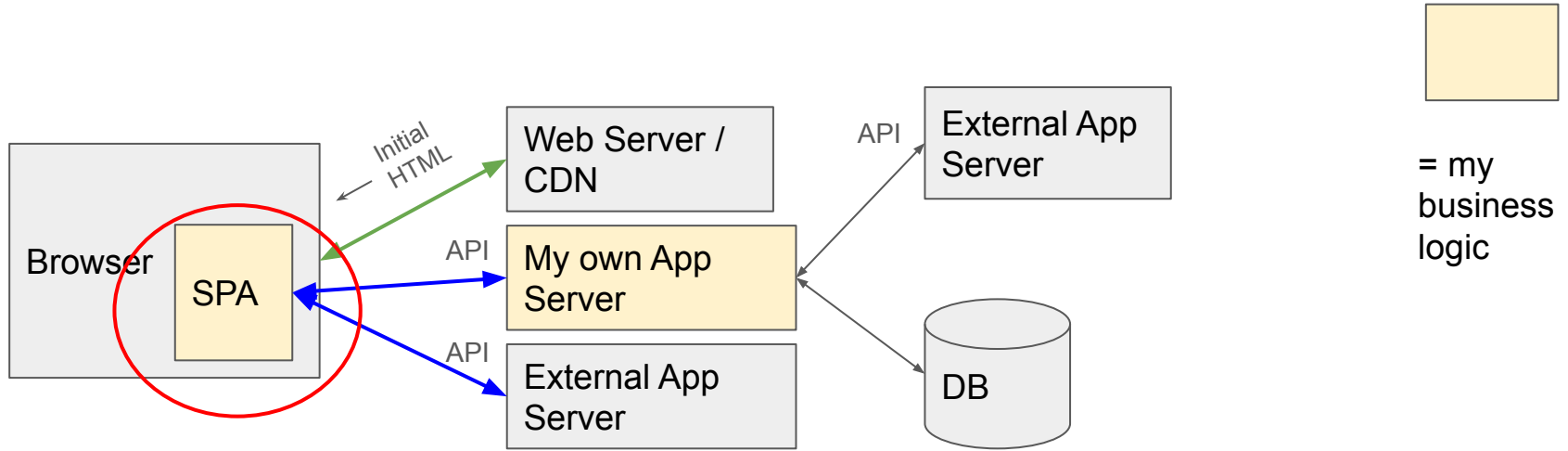


TIA - fronted

Routing, Browser's storage, Bootstrap, Example app

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Client side / Frontend



Example - full frontend React app

<https://github.com/jkosticova/not-twitter>

Tag: Frontend_React_app

- Created with Vite
 - Component tree
 - React hooks
 - Routing (two pages)
 - Bootstrap styles
 - Using browser's local storage for data
-
- No backend yet
 - No authentication

```

...
return (
  <div className="container">
    <Header messages={messages} />
    <BrowserRouter>
      <Routes>
        <Route
          path="/"
          element={<MessageListPage messages={messages} />}
        />
        <Route
          path="/compose"
          element={<NewMessagePage setMessages={setMessages} />}
        />
      </Routes>
    </BrowserRouter>
  </div>
)
...

```

Router **in App.jsx** (recommended pattern), navigation examples:

1. **Button navigating to /compose** **<Link className="btn btn-primary" to="/compose"> + </Link>**
2. **Programmatically navigation to "/"**: `const navigate = useNavigate(); navigate("/")`;

Browser's storage

1. LocalStorage

- **Limit:** ~ 5 to 10 MB
- **Scope:** Origin (domain+protocol+port)
- Persistent
 - Cleared explicitly by application or user
- Synchronous

2. SessionStorage

- **Limit:** ~ 5 to 10 MB
- **Scope:** Browser window / tab
- Temporary for page session
 - Cleared when the window / tab is closed
- Synchronous

3. Cookies

- **Limit:** ~ 4 kB pre cookies
- **Scope:** Domain + path
- Temporary (expiration date or session cookie)
- Sent with every HTTP request to the domain
- Security flags: secure, httpOnly

4. IndexedDB

5. Cache API

...

Bootstrap (CSS Framework)

= a free, open-source CSS framework

- In your project folder: `npm install bootstrap`
- (Restart dev server)
- main.jsx: `import 'bootstrap/dist/css/bootstrap.min.css';`

- Responsive grid system based on 12 columns

Bootstrap responsive grid in React

```
<div className="container">  
  <div className="row">  
    <div className="col-md-4">Column 1</div>  
    <div className="col-md-4">Column 2</div>  
    <div className="col-md-4">Column 3</div>  
  </div>  
</div>
```

container
Fixed-width
horizontally
centered container

container-fluid
Full-width container

- React JSX uses “className” instead of “class” to assign classes to elements (“class” is reserved keyword in JavaScript)
- <https://getbootstrap.com/docs/4.0/layout/grid/>

Example - Bootstrap in React

```
<button className="btn btn-primary">Click Me</button>
```

```
<div className="mt-3 mb-3">This div has top and bottom  
margins</div>
```

- **btn:** Bootstrap utility class - basic button styling: padding, borders, background, and font size.
- **btn-primary:** Bootstrap contextual class - primary color, used for “main action” button in UI
- **mt-3:** top margin of size 3
- **mb-3:** bottom margin of size 3

1. Design wireframes and specify user flows
2. Create dumb (stateless) components and create the tree structure
3. Add hooks to components (state managements, effects)
4. Use React router for routing (if necessary)
5. Add styles
6. Use mock data (if necessary)