Common issues/questions

- Where do I start?
- How do I handle reload?
- My elements don't exist!
- How do I handle this 401 error?
- I hate having to rebuild/restart

Where Do I Start?

- Start by writing a basic render method
    - Shows what state variables you needi
    - Everything is based on render()!
- Then add event listeners and service calls
    - For the elements you have rendered
- Write a little bit at a time
    - Confirm it works
    - Only then do you add more

How do I handle reload?

If you reload the page

- ...and assumed they have to login
- ...jarring experience

Instead, on initial load

- Service call to check for session
    - If session, load word then render
    - If no session, render

Do AFTER writing initial render() and login

- And after testing that those work

My Elements don't exist!

render() replaces your elements

- Adding/removing eventListeners is complex
- Not removing eventListeners is memory leak

Instead use event propagation

- Attach event listeners to ancestor element
    - That is NOT replaced by render()
- Confirm if event.target is desired source of event

How do I handle a 401 error on page load?

- This is not an error you need to handle
    - 401 on check for session on load is expected
    - Just render while state says not logged in
- Other errors should be reported to user
    - So user can fix
    - Add current error to state
        - Let render() report it

Restarting is annoying!

During development you can automate restarts:

- Install/use nodemon to handle server restarts
  - Not for js-service-calls, but is part of project2

```
nodemon server.js
```

- webpack can run in "watch" mode to auto-rerun

```
npx webpack --watch
```

Lessons for Project 2

- Services won't always return perfect data
    - Services not specific to app/version
    - May need to call multiple services
    - Translate returned data into what app needs
- Client State !== Server State
    - Only one user, for example
    - Different goals
- Render HTML, don't show/hide
    - Show/hide doesn't scale
    - Make it always able to render()
        - Decoupled from momentary logic