

# **ACCESSIBILITY (A11Y)**

- Not all users have the same options
- ...and not always for reasons you'd consider
- Keyboard vs mouse vs touch
- colors vs shape & size
- text vs image
- screen size
- text size
- font legibility
- word choice
- shared computers
- other programs (PDF)

# **AS A SERVICE (AAS)**

- SaaS (Software as a Service)
- PaaS (Platform as a Service)
- FaaS (Function as a Service)
- etc

Overall concept is to move some functionality to be a remote service (Cloud)

- might be configuration, as per PaaS
- different scalability model (Pro or Con)
- different risks (Pro or Con)

# INTERNATIONALIZATION (I18N)

Also Localization (l10n)

- swap out text
  - translate in context?
  - pluralization!
  - who translates? (automatic == poor)
  - number, currency, date, times
  - names
  - left-to-right vs right-to-left (vs vertical)
- browsers provide language preferences to server
- what about text from services?

# LICENSING

Berne Convention says:

- Most creative works are automatically protected

Most jurisdictions say:

- "derivative works" are protected

"no cost" does not mean "can be used in a derivative work"

- GPL (v2 vs v3)
- open source vs free source vs freely available
- BSD, Apache, MIT, various Creative Commons

# OBFUSCATION

Obfuscation = hiding your code

Not very effective, never certain ...except at creating bugs and making debugging harder

All front-end code is fully exposed

# OPTIMIZATION

School is always talking about optimization and efficiency

In real world:

- yeah,  $O(n^2)$  is generally bad
- otherwise dev time is in shorter supply
- "premature optimization is the root of all evil"
- Don't optimize until you have a problem
- Always benchmark before optimization changes

# PAGINATION

A web page with many results?

- Show contents in "pages" of results
- often not page reloads

A service call with many results?

- Return "pages" of results
- service returns some "cursor" to indicate next set of results

# VERSIONING

Semver is great

- what about service APIs?
- what about dependencies changing?
- what about being wrong about the impact of a change?
- what do you support?