

# Optimizing your Front End

# Why?

- building large client side applications can cause a huge load time
- css, large js files.
- Mobile users, dialup etc.

Making Sites fast!

# Make fewer Requests (and make those request smaller)

- tons of request for images.
- minimize JS and CSS requests
- bundle your JS and minify
- compress your CSS
- GZIP

# GZIP

- GZIP performs best on text-based assets: CSS, JavaScript, HTML
- All modern browsers support GZIP compression and will automatically request it
- Your server needs to be configured to enable GZIP compression
- Some CDNs require special care to ensure that GZIP is enabled
- <https://www.youtube.com/watch?v=whGwm0Lky2s&feature=youtu.be&t=14m11s>

In action

# Use a CDN

- **C**ontent **D**elivery **N**etwork
- Increase parallelism
- chance of cached assets
- geographical location

# Images

- different sizes
- on your own CDN



# Caching

- Memoization, but for the web
- cache invalidation

# Beyond this

- NGINX
- SQUID
- Varnish