How Much Javascript?

Tony Tallmadge – Computer-Aided Engineering
Not a Javascript-hating presentation

• Javascript can be awesome
• Donuts are awesome
• But too much javascript, like donuts, can make you sluggish and sick
Javascript has made the web a more usable place, in general

- Enhancements to server-rendered content
  - Autofocus in first field
  - Select All for lots of selections
  - Make Billing same as Shipping
and more powerful

• Greater enhancements
  • Sortable, filterable, editable tables
• Fully featured javascript-centered web apps
All great, but

• There are a sizable amount of sites where I’m not sure when I’m able to click/tap on the thing I want
• Or, I’m reading something and something pushes it off the page

• Just commercial site? Not always.
Time To Interactive (TTI)

• Time to Interactive
  • the point at which layout has stabilized, key webfonts are visible, and the main thread is available enough to handle user input
  • https://developers.google.com/web/tools/lighthouse/audits/time-to-interactive
Lighthouse Chrome extension

Performance

Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Contentful Paint</td>
<td>2,300 ms</td>
<td>✔️</td>
</tr>
<tr>
<td>Speed Index</td>
<td>3,890 ms</td>
<td>✔️</td>
</tr>
<tr>
<td>Time to Interactive</td>
<td>9,220 ms</td>
<td>🔴</td>
</tr>
<tr>
<td>First Meaningful Paint</td>
<td>4,210 ms</td>
<td></td>
</tr>
<tr>
<td>First CPU Idle</td>
<td>9,220 ms</td>
<td>🔴</td>
</tr>
<tr>
<td>Estimated Input Latency</td>
<td>65 ms</td>
<td>✔️</td>
</tr>
</tbody>
</table>

Values are estimated and may vary.

Opportunities

These are opportunities to speed up your application by optimizing the following resources.
What is the purpose of your page/site?

• and how can it be done most simply?
How much javascript?

• Just enough to get the job done