RUM Community Group

2025-06-20 Edition

Agenda

- Logistics
- Next Meeting
- Agenda
  - Barry's Bytes (fetchLater, web-vitals v5?) (Barry Pollard) + Soft Navs (Michal Mocny)
  - Firefox interactionId (Nazim Can Altinova)
  - Unresponsive crash reports, Self Profiling (Issac Gerges)

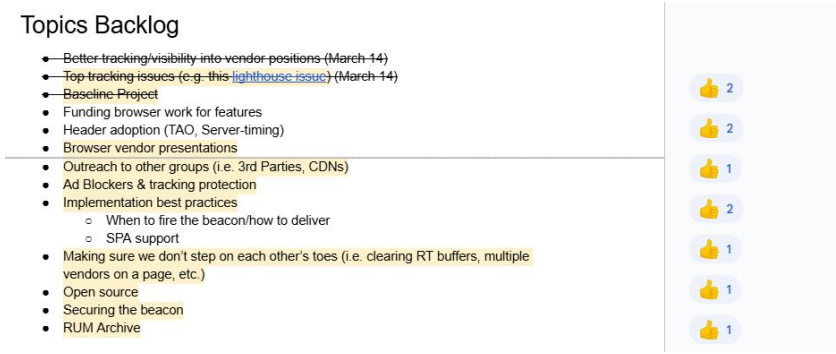
Logistics

- Meeting cadence
  - 2nd Friday of the Month
  - 60 minutes
  - 10am ET
- Agenda Document
  - (bit.ly/rumcg-agenda)
- Google Meet for Meetings
  - sub to rumcg-participants for invites
- Chat on Web Performance Slack
  `#w3c-rum-community-group`
  - (invites)
- public-rumcg@w3.org
  - (for discussions)

- RUM CG Github Repo
  - github.com/w3c-cg/rum
  - Group details
  - Links
  - Meeting minutes?
- RUM CG Tracking Project
  - github.com/orgs/w3c-cg/projects/1
- Meeting Minutes via fireflies.ai (NEW)
  - AI summary + transcript will be posted after
  - Full video recording also available

Next Meeting

- Fri **August ??th** @ 10am EST
  - 2nd Friday of each month
- Topics?
  - Implementation best practices
  - *(propose your topic here!)*
- Submit & Vote topics @ bit.ly/rumcg-agenda



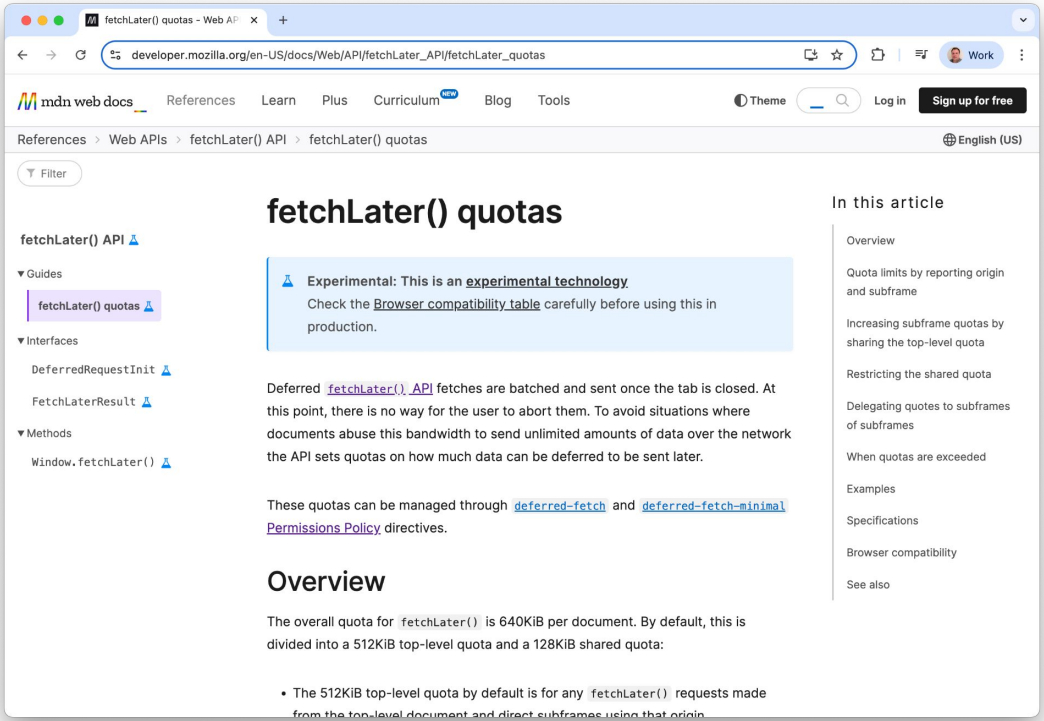

Google
BARRY'S
BYTES

What's new in WebPerf from Google

- Soft Navs - Michael covering
- FetchLater and quotas
- web-vitals v5 and some thoughts on how to use LoAF
- Speculation Rules improvements
- Compression Dictionary Transport

FetchLater and quotas

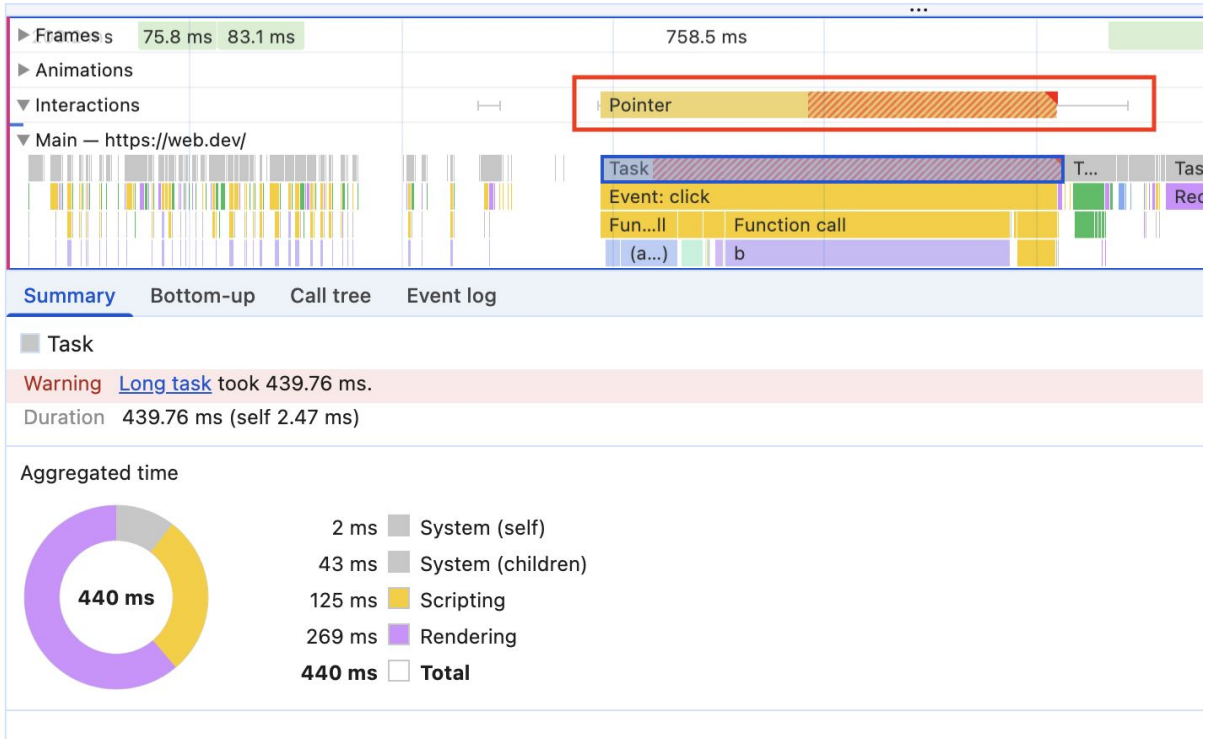
- FetchLater has strict quotas
- Sometimes this hits in unexpected ways (crbug.com/410528357)
- Check it and **prepare to fallback**
- Read the docs



web-vitals v5

- Only maintained branch going forward
- onFID() has been removed
- We use Baseline Widely available for code and builds
- Improved LoAF attribution (covering in next slides)
- Saves element targets when performance observers fire, even if not reported until later (less unknown targets)
- Custom element selector if needed
- Memory and event handlers improvements

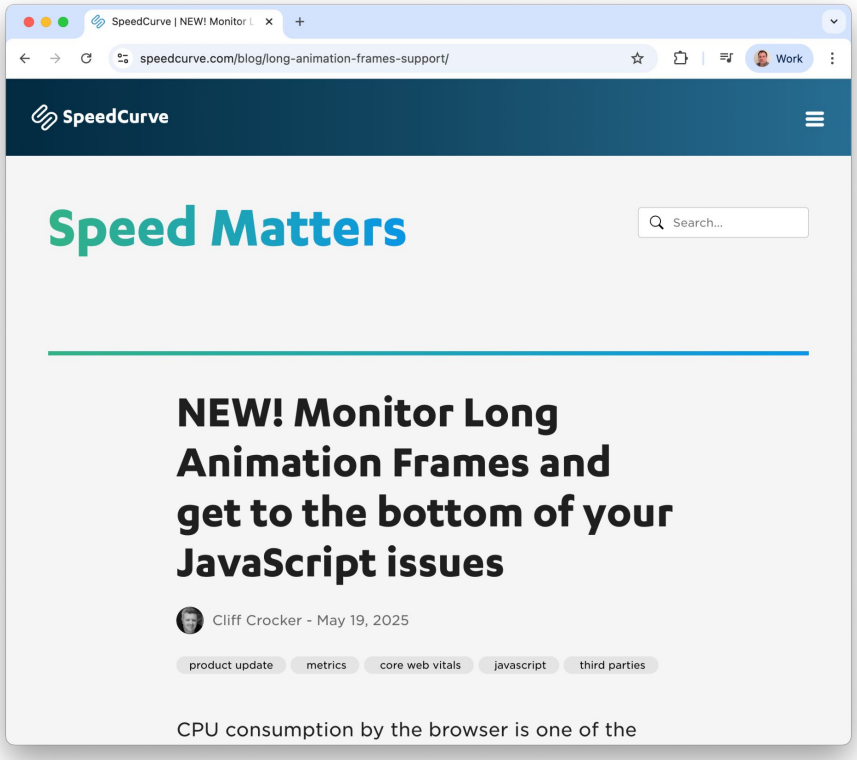
web-vitals v5 - improved LoAF attribution

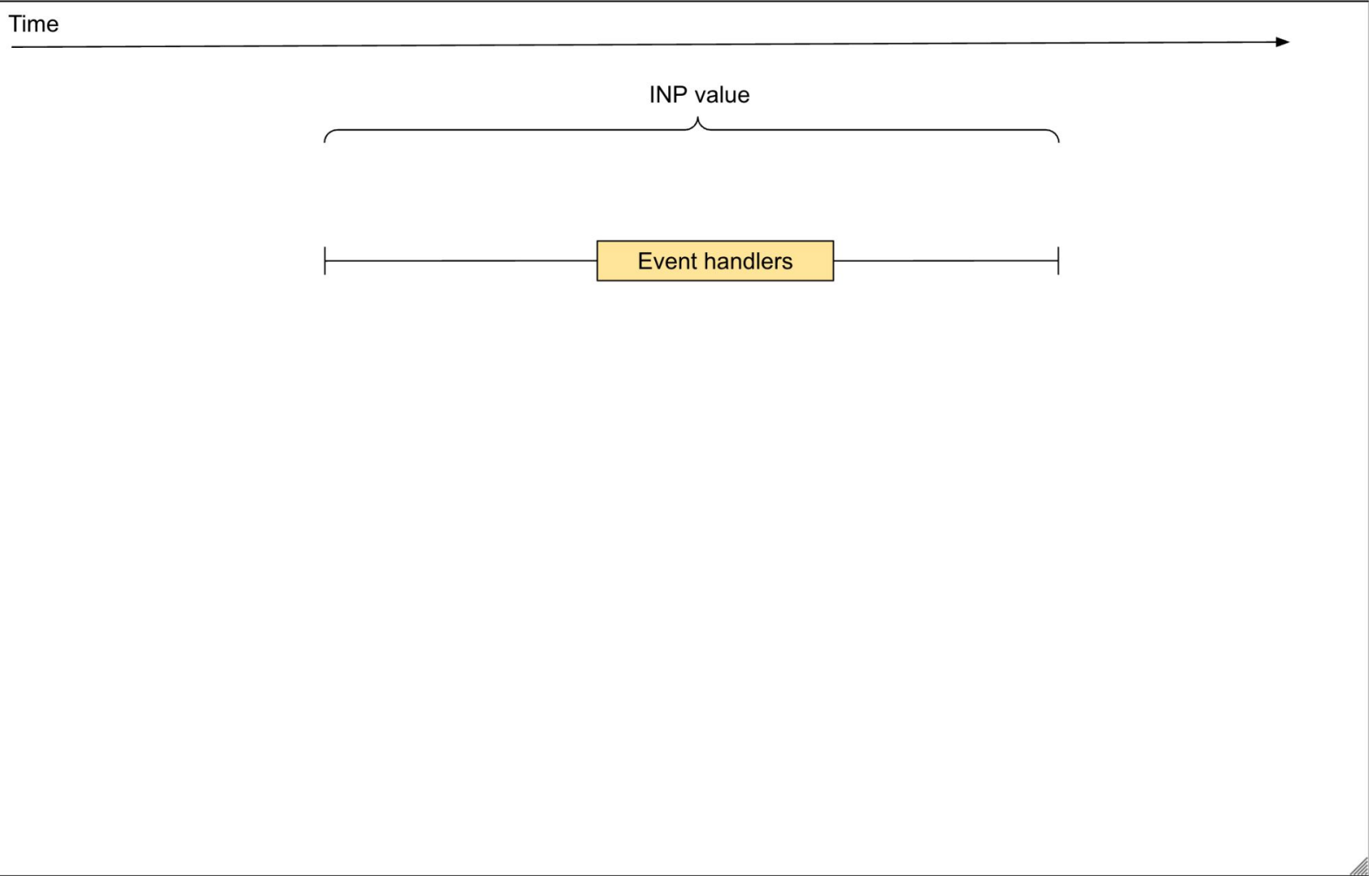


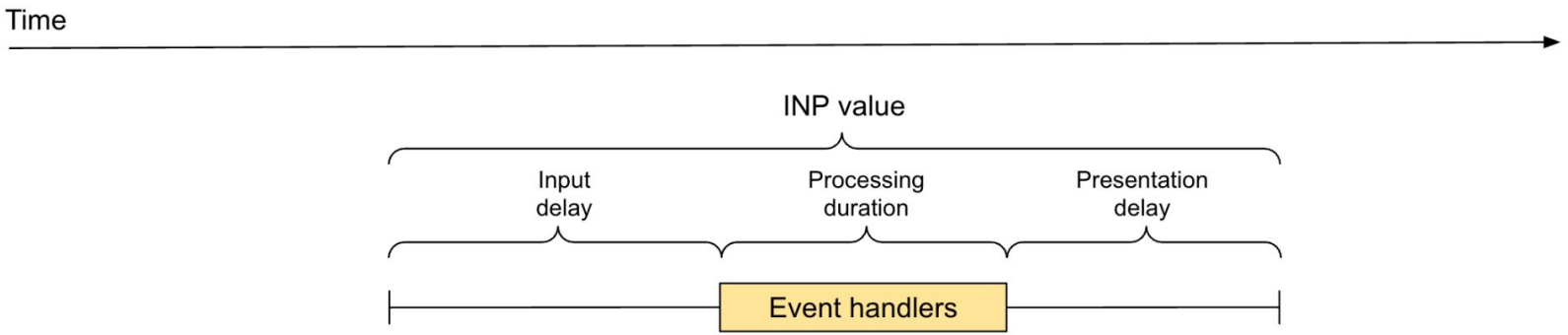
web-vitals v5 - improved LoAF attribution

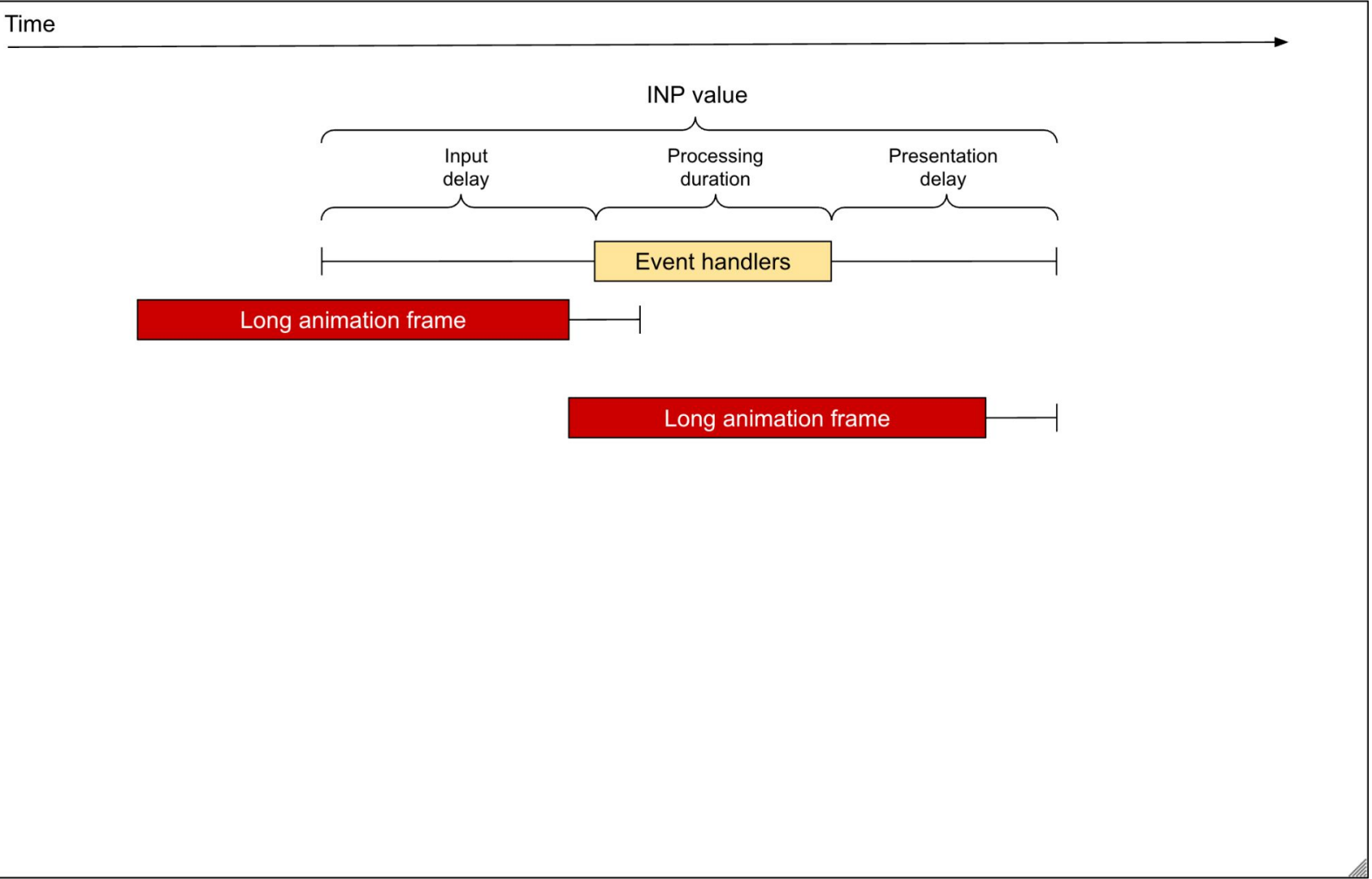
- LoAF contains a LOT of data
- Can beacon it all
  - Speed Curve does this
  - But that's **a lot** to beacon
- Can beacon a sampling of users
  - But miss stuff
- Can beacon only some stuff
  - E.g. longest script

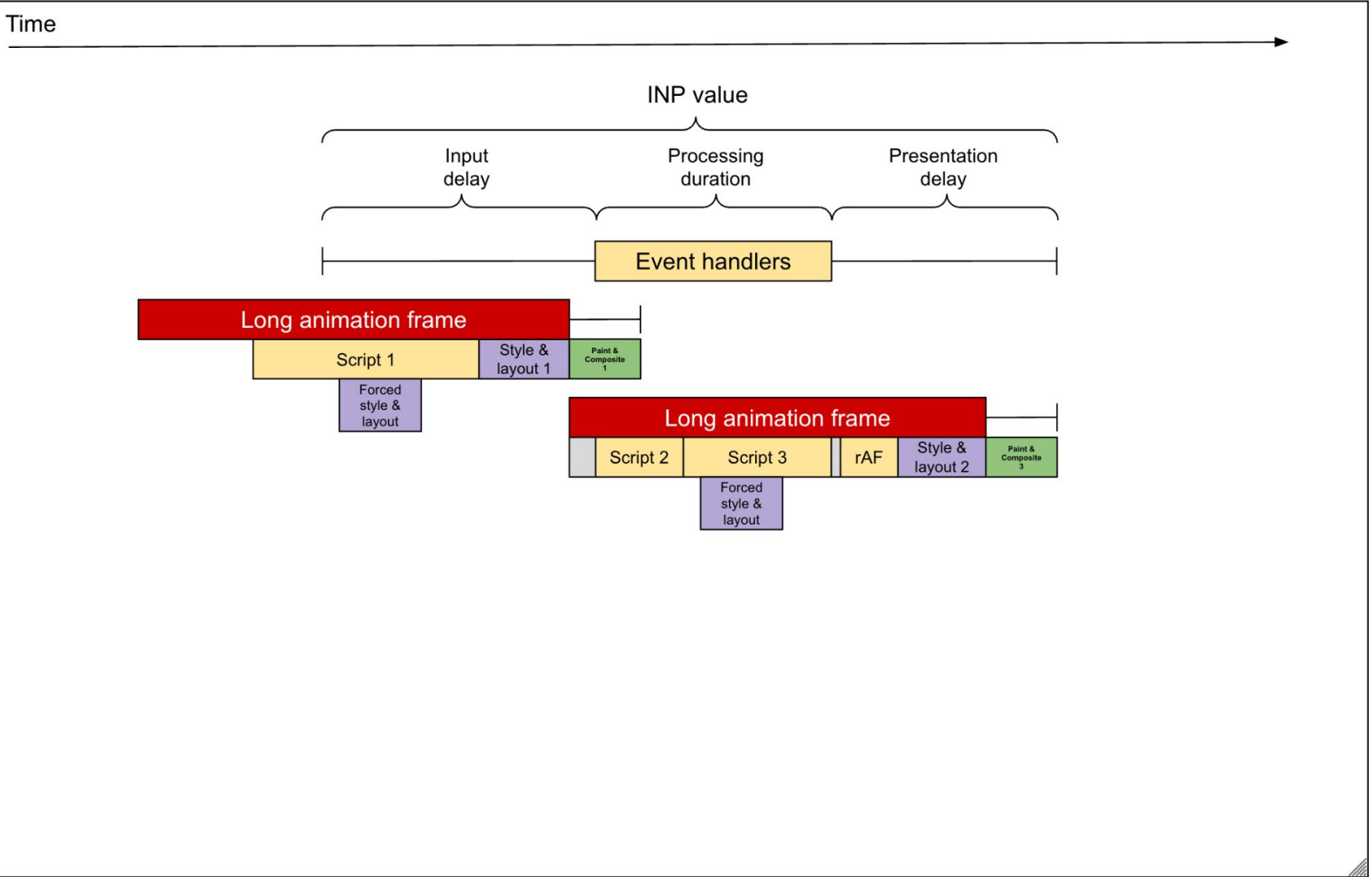
We wanted to look more at the last option for web-vitals v5

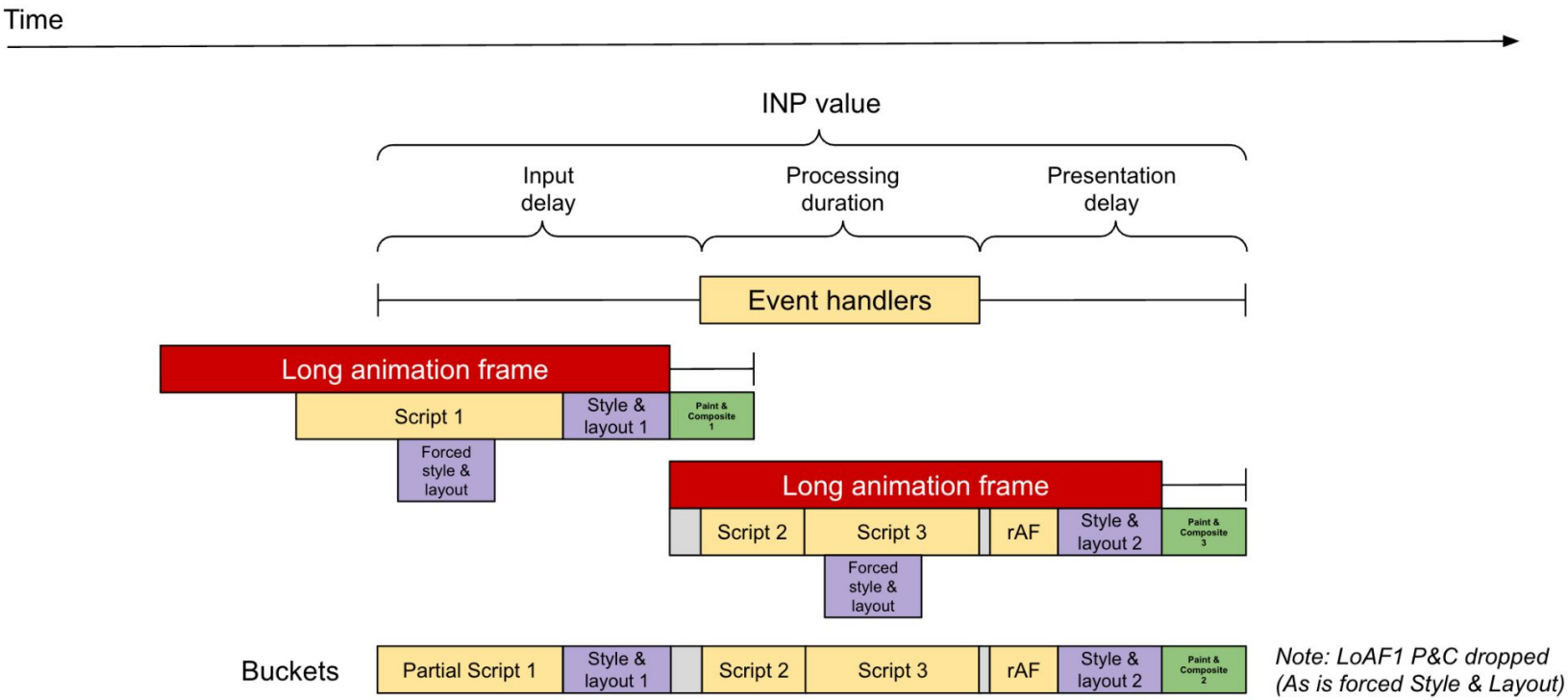


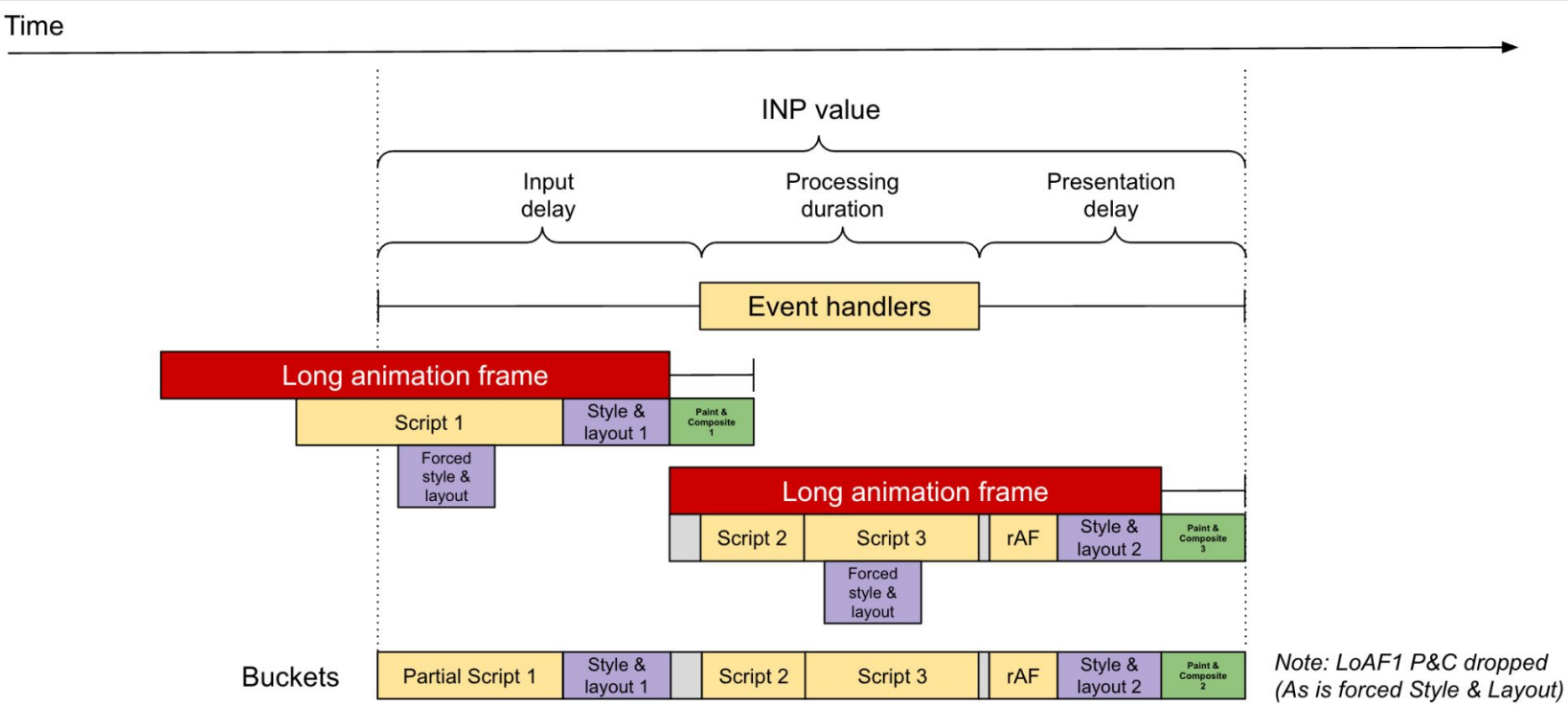

Time
INP value
Event handlers


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Long animation frame


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Script 1
Style & layout 1
Paint & Composite 1
Forced style & layout
Long animation frame
Script 2
Script 3
rAF
Style & layout 2
Paint & Composite 3
Forced style & layout


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Script 1
Style & layout 1
Paint & Composite 1
Forced style & layout
Long animation frame
Script 2
Script 3
rAF
Style & layout 2
Paint & Composite 3
Forced style & layout
Buckets
Partial Script 1
Style & layout 1
Script 2
Script 3
rAF
Style & layout 2
Paint & Composite 2
Note: LoAF1 P&C dropped
(As is forced Style & Layout)


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Script 1
Style & layout 1
Paint & Composite 1
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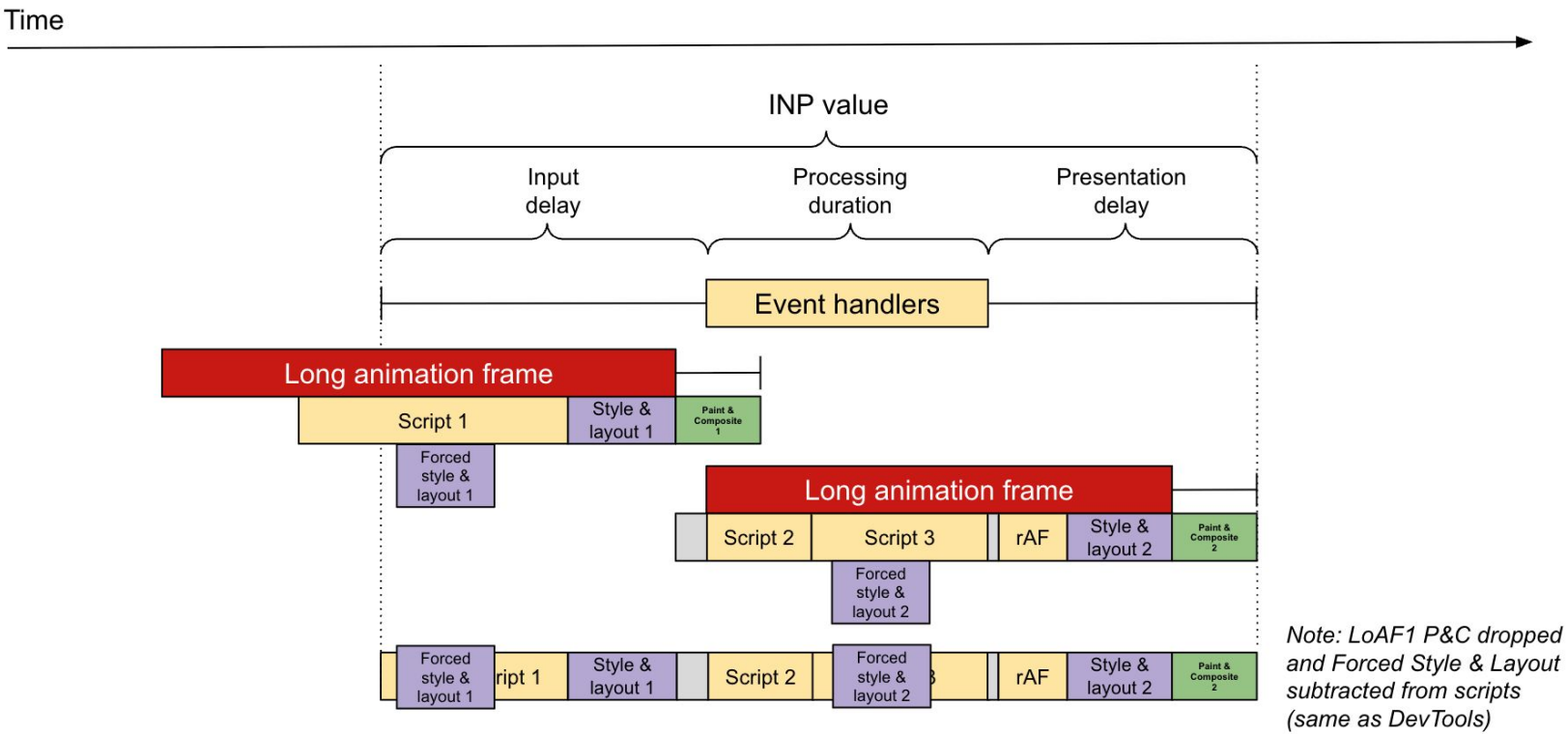
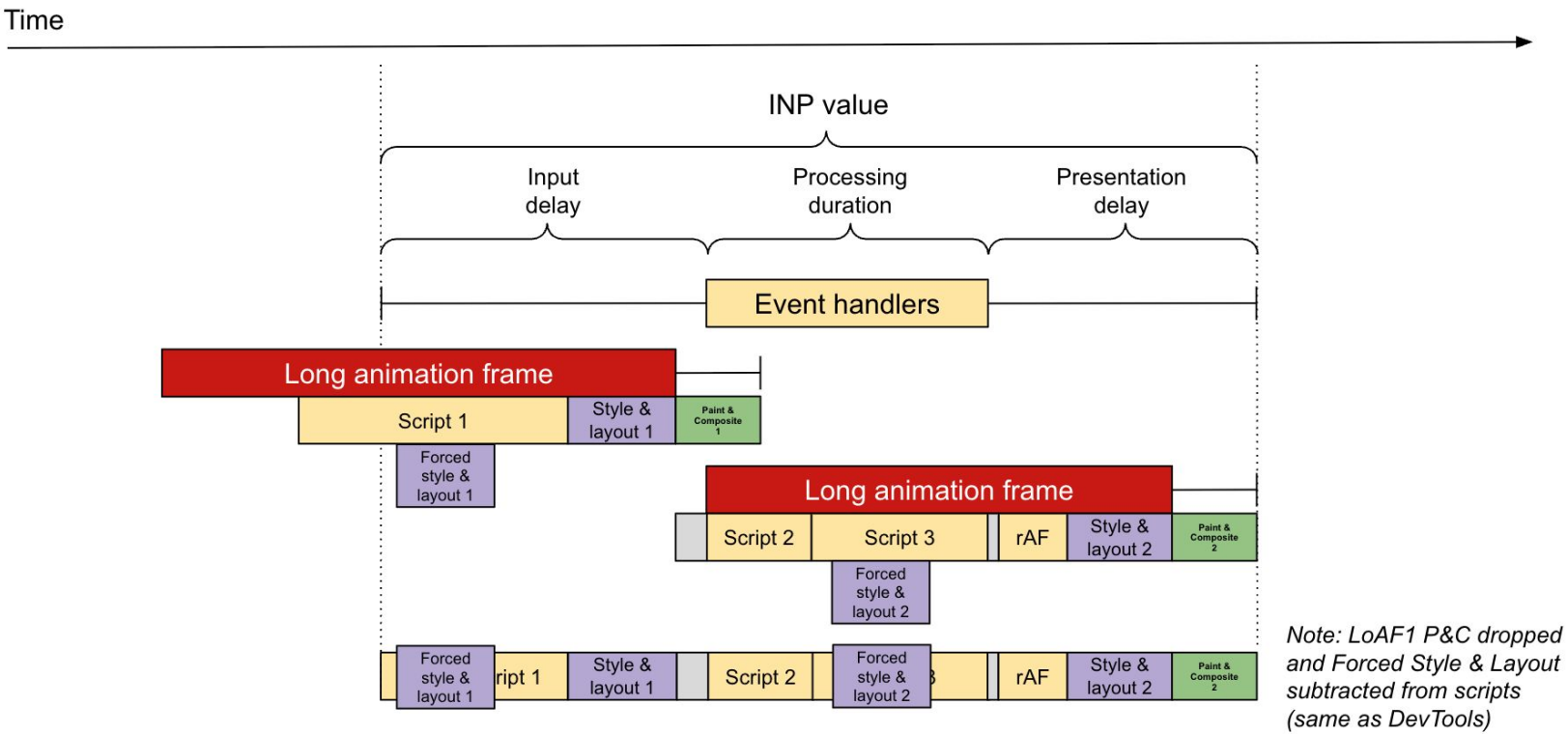
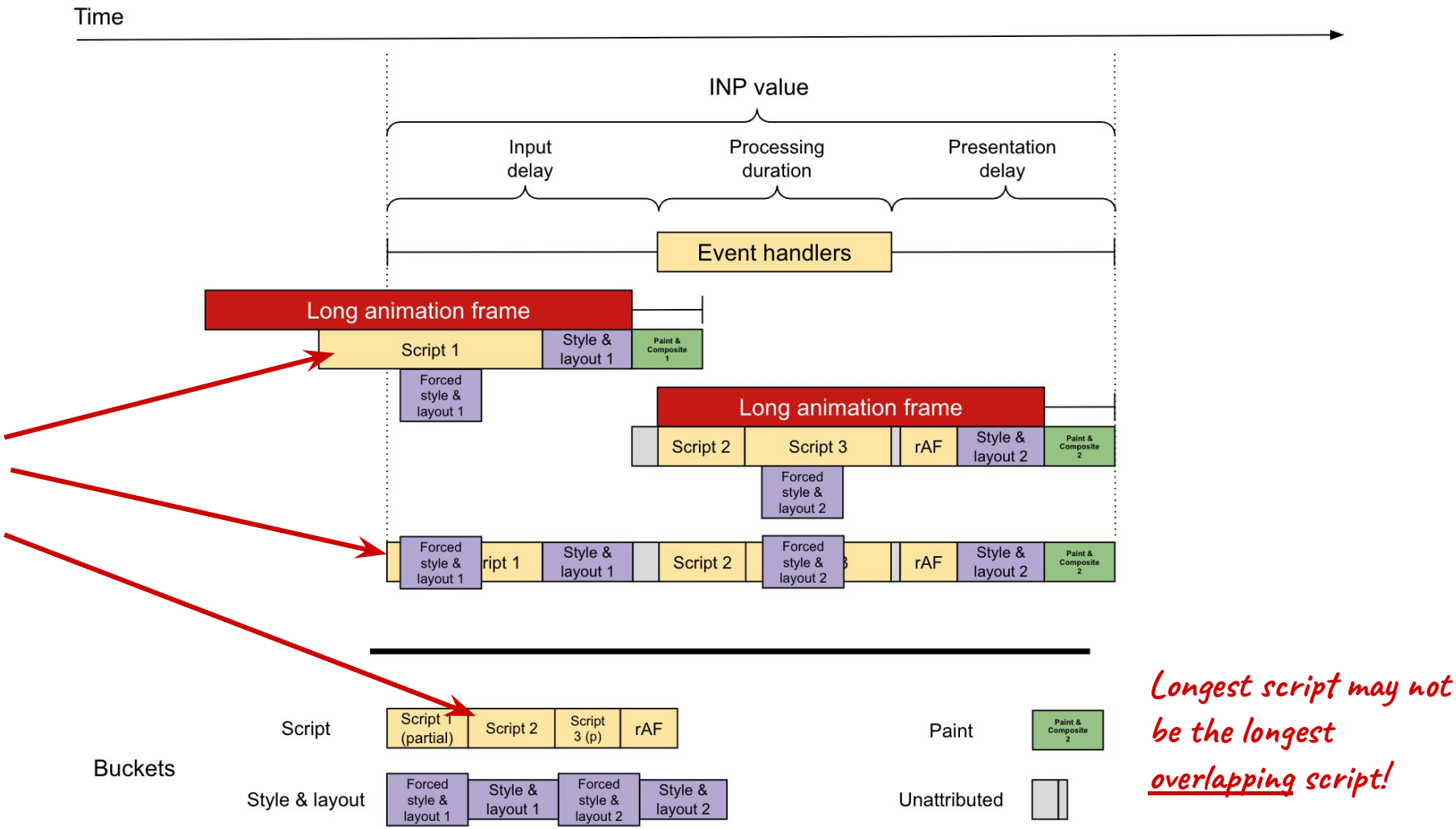


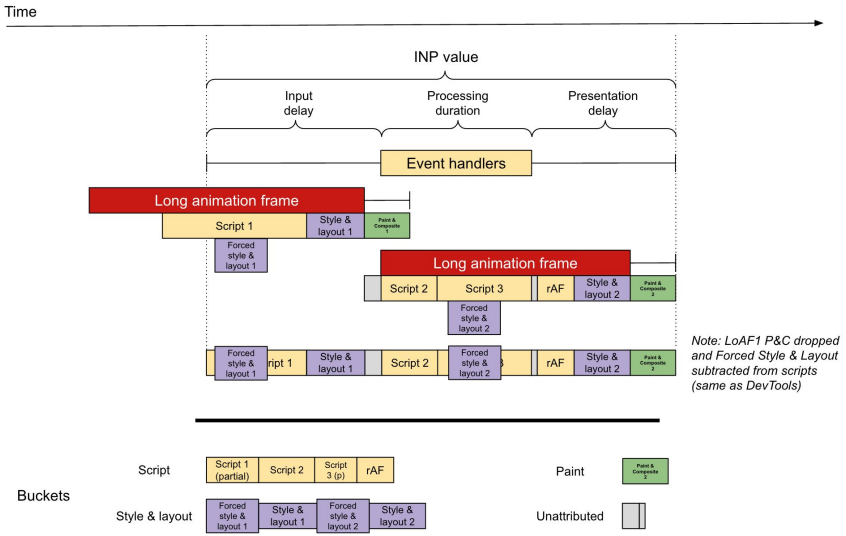
Note: LoAF1 P&C dropped and Forced Style & Layout subtracted from scripts (same as DevTools)


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Script 1
Style & layout 1
Paint & Composite 1
Forced style & layout 1
Long animation frame
Script 2
Script 3
rAF
Style & layout 2
Paint & Composite 2
Forced style & layout 2
Forced style & layout 1
ript 1
Style & layout 1
Script 2
Forced style & layout 2
rAF
Style & layout 2
Paint & Composite 2
Note: LoAF1 P&C dropped and Forced Style & Layout subtracted from scripts (same as DevTools)
Buckets
Script
Script 1 (partial)
Script 2
Script 3 (p)
rAF
Paint
Paint & Composite 2
Style & layout
Forced style & layout 1
Style & layout 1
Forced style & layout 2
Style & layout 2
Unattributed


Time
INP value
Input delay
Processing duration
Presentation delay
Event handlers
Long animation frame
Script 1
Style & layout 1
Paint & Composite 1
Forced style & layout 1
Long animation frame
Script 2
Script 3
rAF
Style & layout 2
Paint & Composite 2
Forced style & layout 2
Forced style & layout 1
ript 1
Style & layout 1
Script 2
Forced style & layout 2
rAF
Style & layout 2
Paint & Composite 2
Buckets
Script
Script 1 (partial)
Script 2
Script 3 (p)
rAF
Paint
Paint & Composite 2
Style & layout
Forced style & layout 1
Style & layout 1
Forced style & layout 2
Style & layout 2
Unattributed
Longest script may not be the longest overlapping script!

web-vitals v5 - improved LoAF attribution

- Longest intersecting script and buckets



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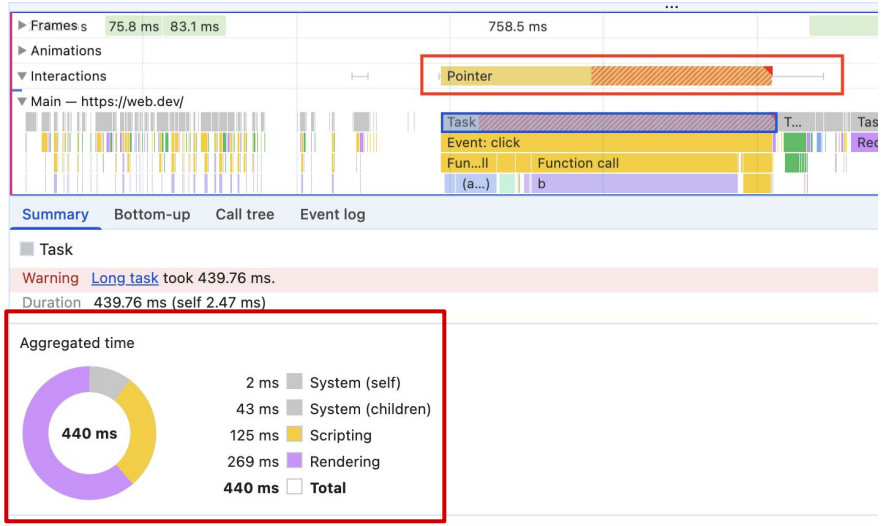

web-vitals v5 - improved LoAF attribution

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Speculation Rules improvements

- Large platform roll outs
  - WordPress 6.8 - **On by default** - conservative prefetch - 30/45% of websites
  - Shopify - **On by default** - conservative prefetch - 5% of the web
  - Cloudflare - working on re-enabling **by default** - 10% of home pages

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- New features
  - 136 - tag field
  - 138 - target_hint field
  - 138 - Clear-Site-Data header: prefetchCache and prerenderCache
  - 138 - ServiceWorker support for prefetch (currently at 50%)
  - 138 - Viewport heuristics for mobile for moderate
  - 140? - Viewport heuristics for mobile for eager

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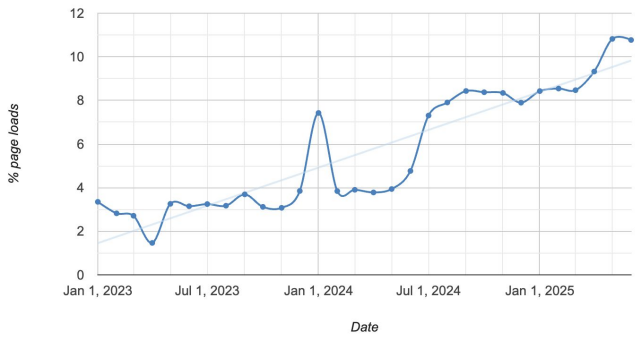
- More browser support coming?
  - Mozilla working on it for prefetch for Firefox - https://bugzilla.mozilla.org/show_bug.cgi?id=1969396
  - Safari positive on subset - https://github.com/WebKit/standards-positions/issues/54/

Speculation Rules adoption

SpeculationRules Show all historical data:

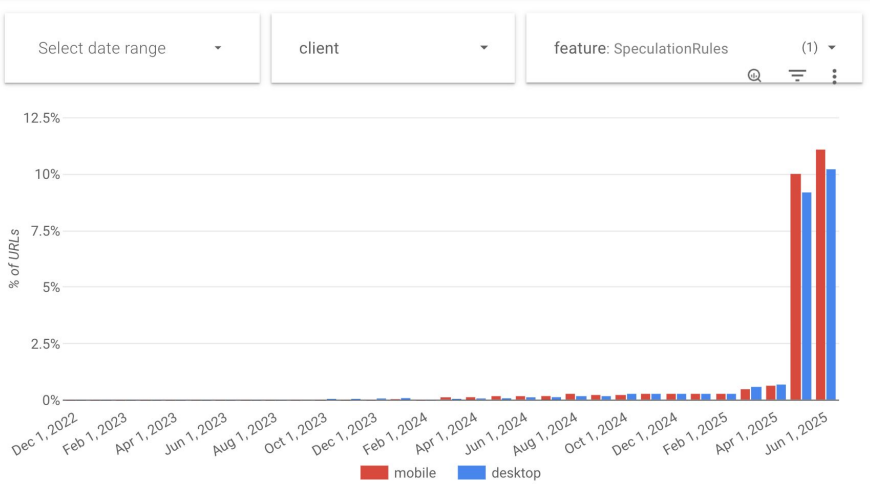
Percentage of page loads over time

The chart below shows the percentage of page loads (in Chrome) that use this feature at least once. Data is across all channels and platforms. Newly added use counters that are not on Chrome stable yet only have data from the Chrome channels they're on.



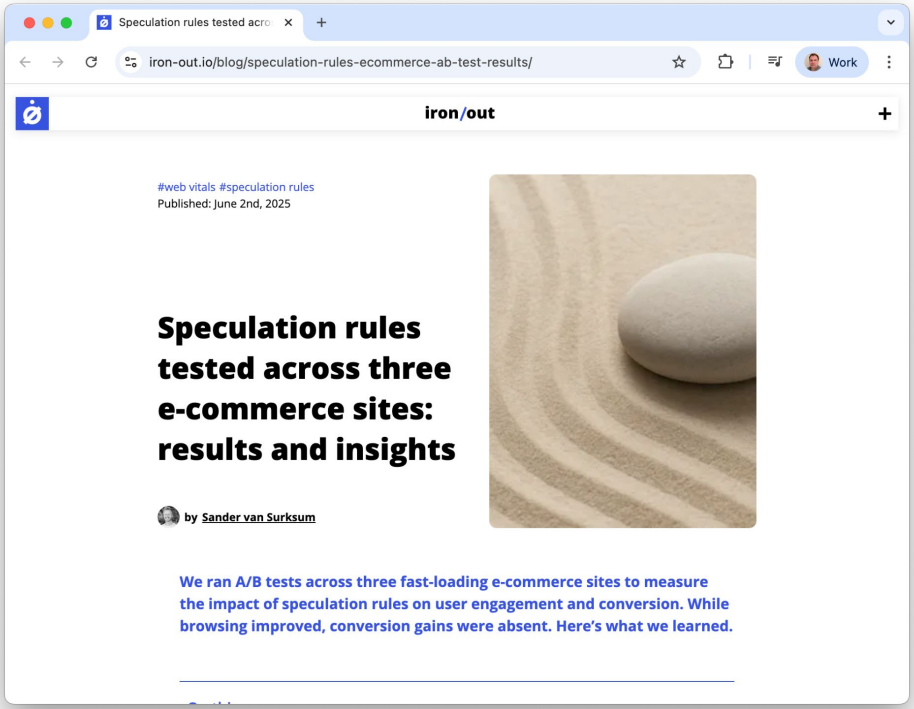
Adoption of the feature on top sites

The chart below shows the adoption of the feature by the top URLs on the internet. Data from HTTP Archive.



https://chromestatus.com/metrics/feature/timeline/popularity/3932

Speculation Rules - measure it in RUM!!



Detect Speculations: client-side

- Prefetch - deliveryType:

```
> performance.getEntriesByType('navigation')[0].deliveryType;
< 'navigational-prefetch'
```

- Prerender - non-zero activationStart:

```
> performance.getEntriesByType('navigation')[0].activationStart
< 2760.60000000149
```

Detect Speculations: server-side

Detect and disable prerender server-side

Prerendered pages will be sent with the `Sec-Purpose` HTTP header:

```
Sec-Purpose: prefetch;prerender
```

Prefetched pages using the Speculation Rules API will have this header set to just `prefetch`:

```
Sec-Purpose: prefetch
```

https://developer.chrome.com/docs/web-platform/prerender-pages#detect-server-side

Compression Transport Dictionary

- Being heavily used by Google
  - Ads/DoubleClick
  - Google Search
- Case study:
  - https://developer.chrome.com/blog/search-compression-dictionaries
- Know of several companies looking into this technology
- Usage is likely to increase!
- Detecting dcb/dcz client-side:

```
> performance.getEntriesByType('navigation')[0].contentEncoding
< 'dcb'
```

Thank you!

Reach out:

@tunetheweb on most socials

barrypollard@google.com