



# INP

## A new metric for interactivity

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# What is INP?

“INP is a metric that assesses a page's overall responsiveness to user interactions by observing the latency of **all click, tap, and keyboard interactions** that occur throughout the lifespan of a user's visit to a page. The final INP value is **the longest interaction observed**, ignoring outliers.”



INP is set to replace FID in the Core Web Vitals -

# The importance of responsiveness

- Not about loading - 90% of a user's time on a page is spent after it loads
- Good responsiveness means a webpage reacts promptly to user actions.
- Poor vs. good responsiveness

## gShoe product Q&A:

What is gShoe?

What technology does gShoe use?

How much does gShoe cost?

Poor responsiveness

## gShoe product Q&A:

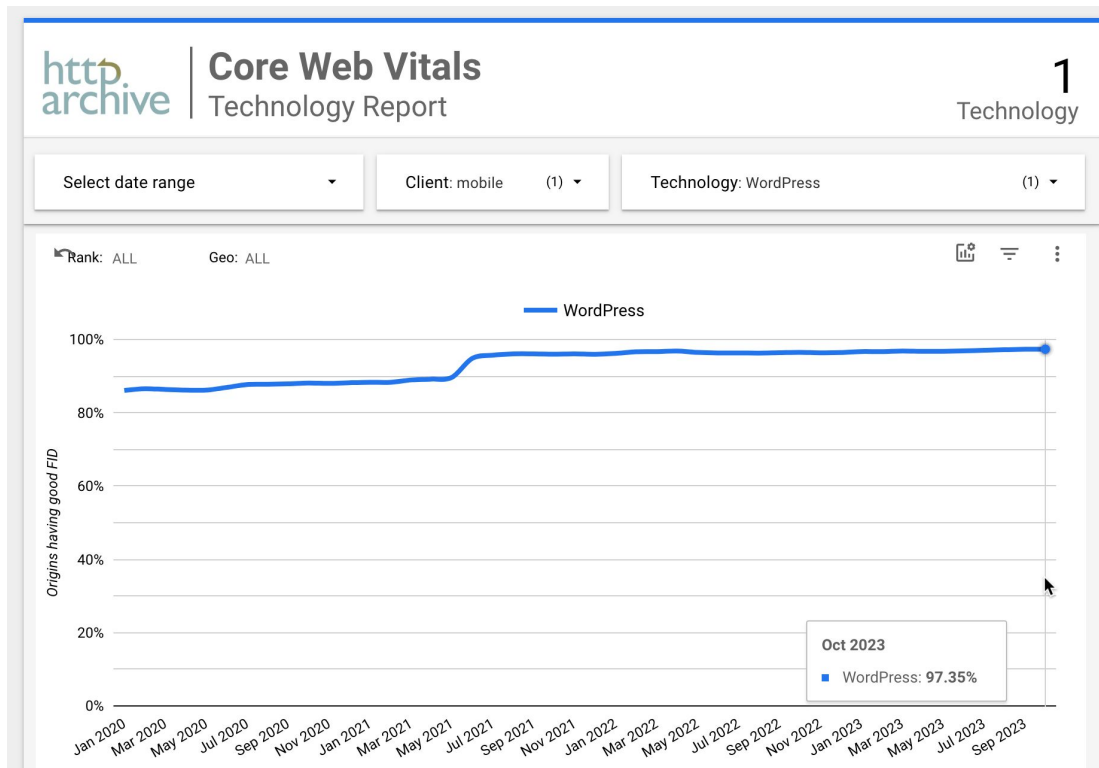
What is gShoe?

What technology does gShoe use?

How much does gShoe cost?

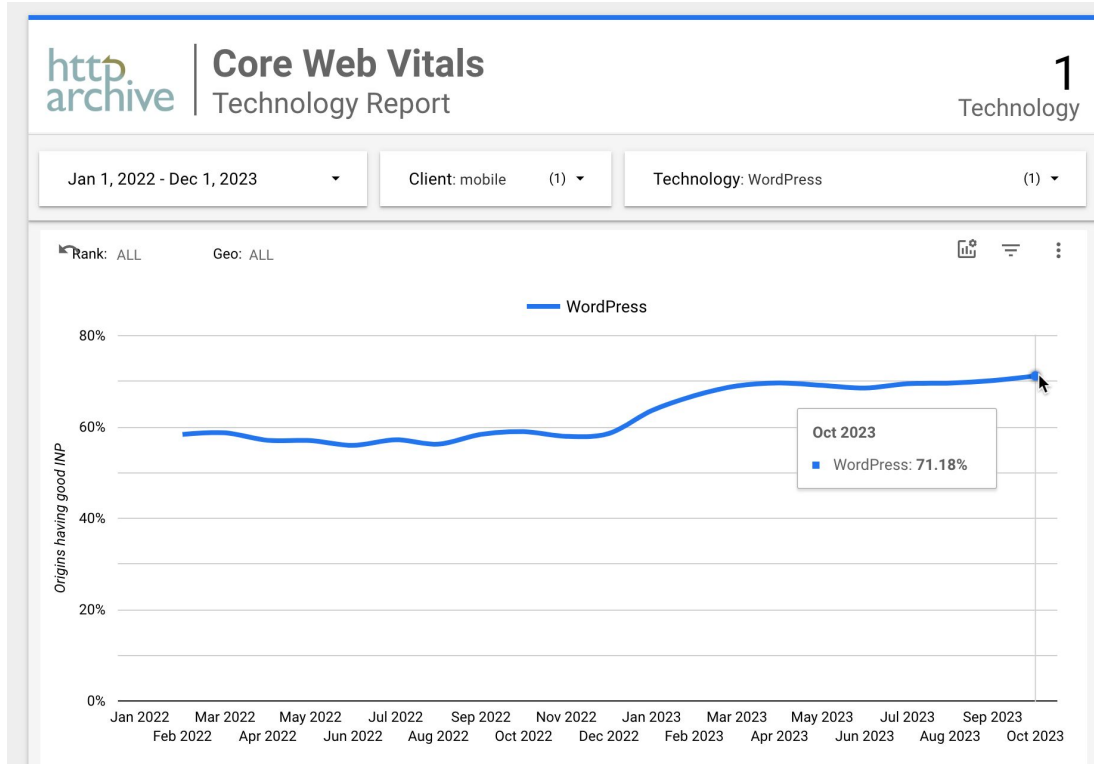
Good responsiveness

# Why replace FID?



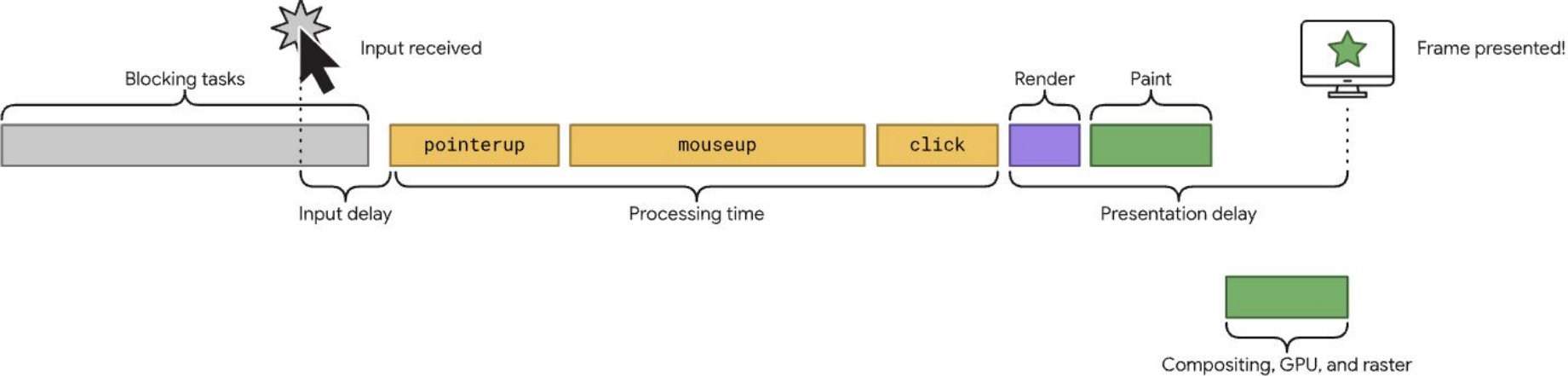
- ~97% / 100% of mobile / desktop views already have good FID
- FID only measures the first interaction

# INP reveals potential improvements

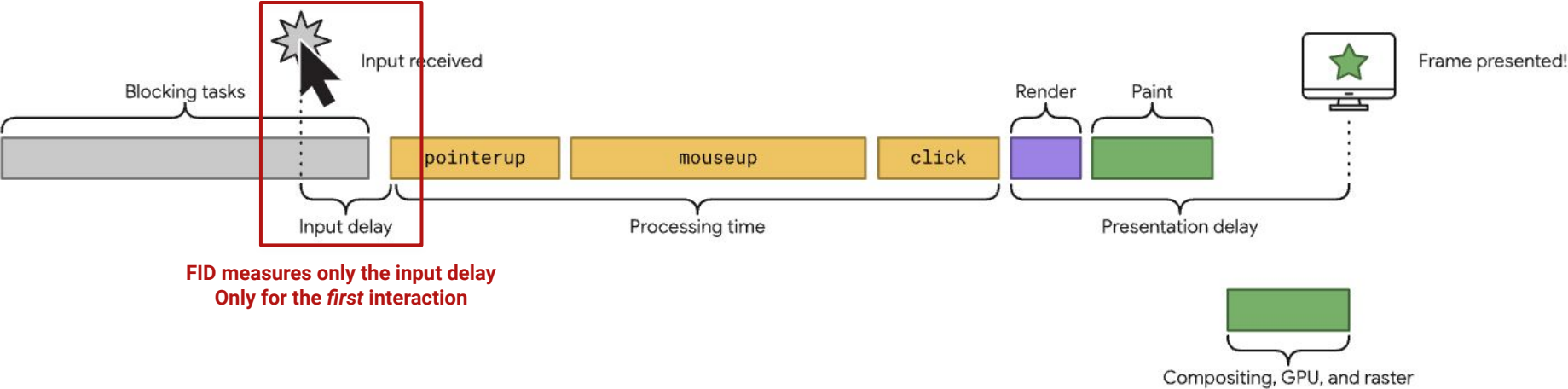


- Only 71% of mobile views have good INP
- INP measures all interactions

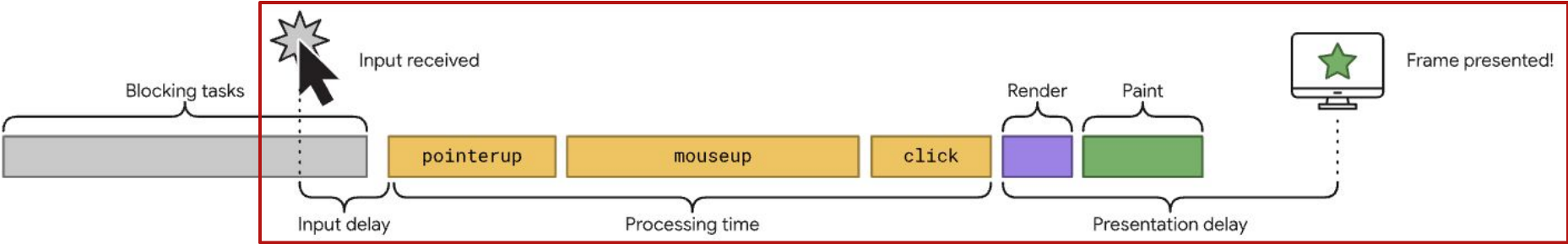
# Measuring interactions



# First Input Delay (FID)



# Interaction to next paint (INP)

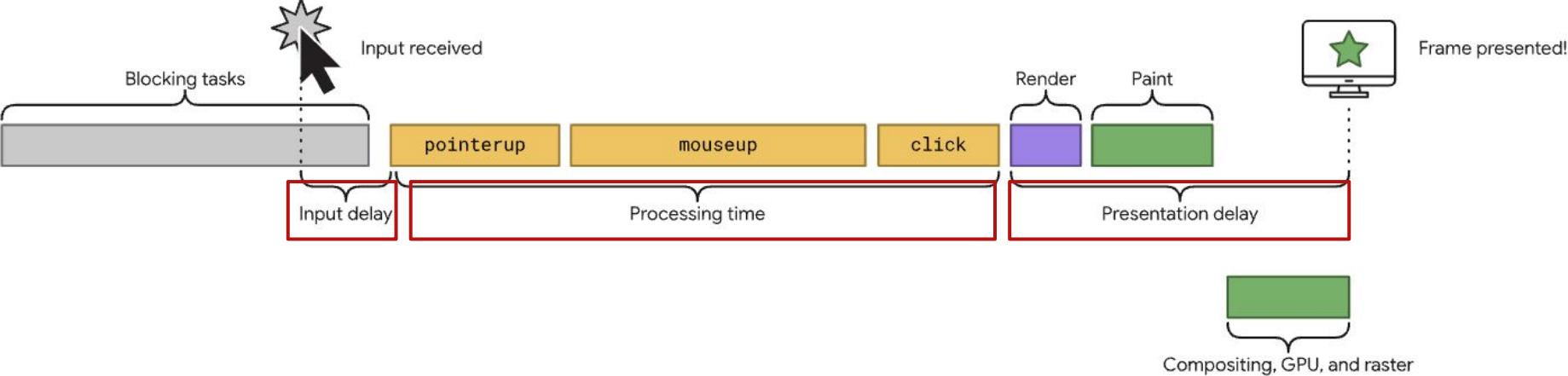


**INP measures the entire presentation delay  
Across all interactions**





# INP parts



# What is a good INP score?

- **Good INP score = 200 milliseconds or less**
- Threshold to measure is the 75th percentile of page loads
- Focus on mobile (desktop already passes)



# Measuring INP

 PageSpeed Insights

 Search Console

 CrUX Dashboard

 GoogleChrome/  
**web-vitals**  
Essential metrics for a healthy site.





## Lab measurement - TBT + INP

- Using the web-vitals.js JavaScript library (includes attribution)
- DevTools Performance panel Interactions track
- Lighthouse timespan mode to record interactions

# What causes slow INP?

- Too much work happening on the page!
  - ◆ Too much JavaScript
  - ◆ Too large a DOM
  - ◆ Too complex CSS selectors
  - ◆ Not leveraging the web platform
- Poorly written code
- Code that does not yield to the main thread

# Fixing slow INP

- Identify issues from field data, identify the interaction that is causing issues
  - Use lab testing to reproduce issue
  - Address specific issue
  - Rinse and repeat
- 
- Prefetch/prerender or speculative prefetching
  - Reduce, reduce, reduce
  - Simplify

QUICK SURVEY



# Thank you

[bit.ly/inp-new](https://bit.ly/inp-new)

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