WEB APPLICATION PERFORMANCE METRICS

What?

- Network Latency
- Server Response Time
- Time to First Byte (TTFB)
- First Contentful Paint
- Page Load Time
- Page Size
- Error Rate
- User Engagement

Network Latency

- Amount of time data takes to travel between server and client
- Measured using traceroute or ping

Server Response Time

- Time it takes server to process and generate response to a request
- Only server-side, no network
- Measured using tools such as Apache Jmeter or LoadRunner

Time to First Byte (TTFB)

- Time between request and first byte arriving at client
- 2 * network latency + server response time

First Contentful Paint

- Time it takes for the first valuable content to appear on the webpage

Page Load Time

- Amount of time it takes webpage to fully load
- Can be done using developer tools in browser

Page Size

- Total size of all resources (HTML, CSS, JS etc.) loaded
- The larger the page size, the greater the page load time
- Measured in bytes

Error Rate

- Measures the relative times an error occures when visiting the web page
- Times an error occurred / total amount of requests

User Engagement

- Duration of session
- Times clicked in session
- Cursor movement
- Page visited per session
- Tools like Google Analytics