

PAGE LOAD SPEED IS A UX CONSIDERATION

How can we check the speed of our pages and how can we make improvements?

WHAT IS PAGE SPEED?

Page speed is the page loading speed of a website determined or measured based on the resources on the website

Things that will directly affect page speed are the quality of the content, images and videos you use, as well as the quality, streamlining and size of the source code.

WHAT IS DIFFERENT BETWEEN PAGE SPEED AND WEBSITE SPEED?

WEBSITE SPEED IS...

Website speed (website performance) is determined by the page loading speed of the entire website based on the server support service, configuration and bandwidth.

DIFFERENT

Website speed is determined by the service provider's support, the indicators are determined by the configuration of the device, hardware and local network.

Pagespeed is determined by the resources used on the website that you (website developers) can intervene and control.

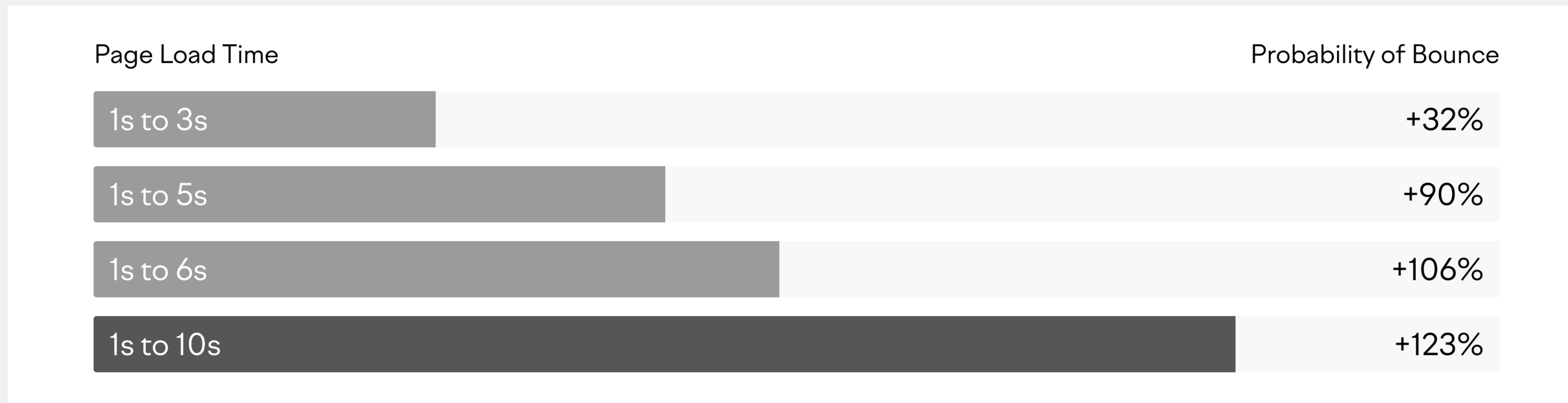
WHY IS PAGE SPEED IMPORTANT?

Page loading speed determines website user behavior

If the page loading speed takes too long, the number of people who have the patience to stay on the page will be less and increase the rate of leaving the page and no longer wanting to use the website

According to Google statistics, page loading speed should be less than 3 seconds to attract users to stay on the page and continue using the service.

Slow page load time increase bounce rate:



<https://www.thinkwithgoogle.com/intl/en-emea/marketing-strategies/app-and-mobile/mobile-page-speed-new-industry-benchmarks/>

HOW TO MEASURE PAGE SPEED?

- Google PageSpeed Insights
- Google Lighthouse
- Google Search Console
- CrUX Dashboard on Data Studio
- Pingdom
- WebPageTest

Click on them!

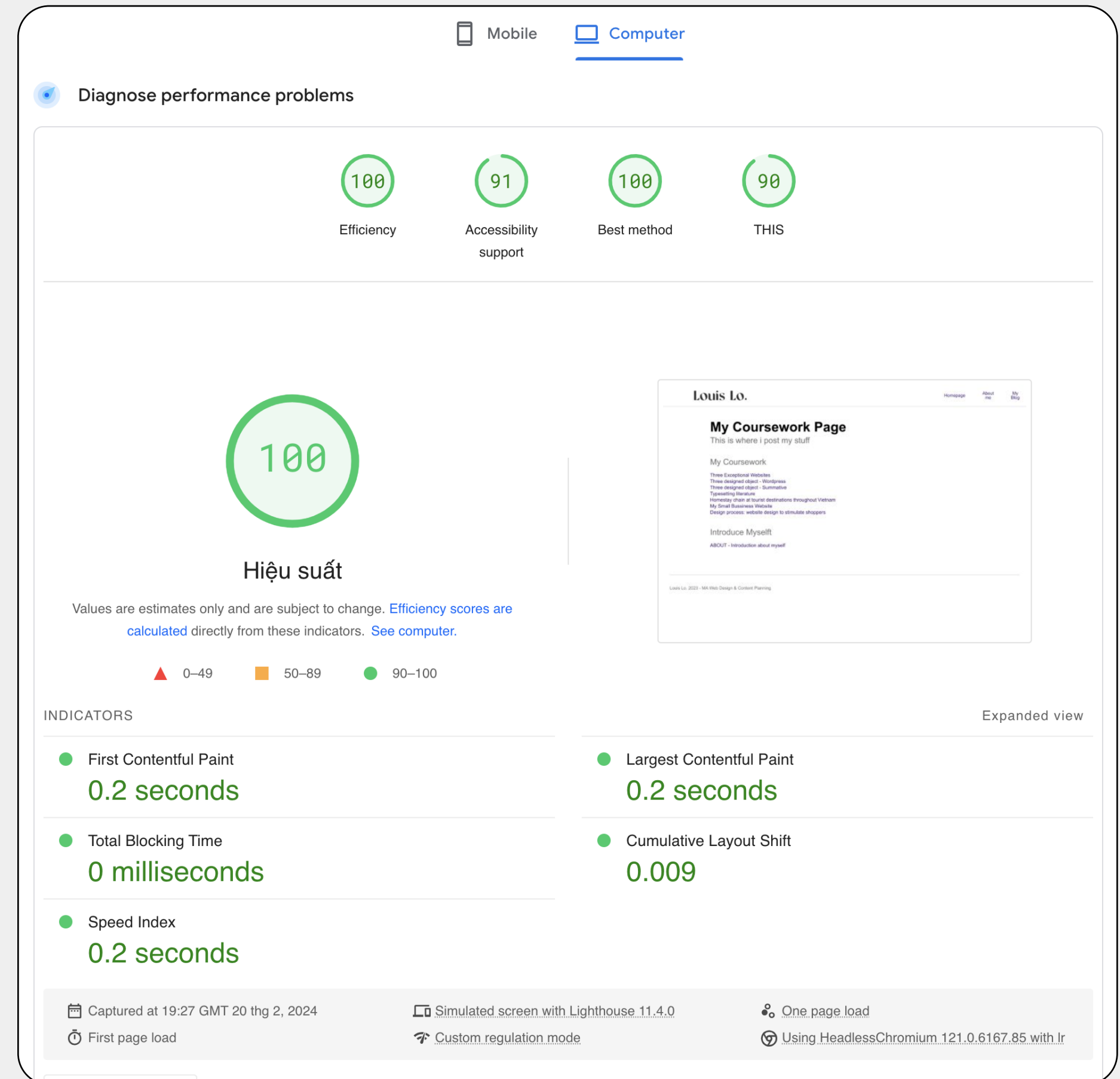
<https://www.impressiondigital.com/blog/page-speed/>

PAGESPEED INSIGHTS FROM GOOGLE

pagespeed.web.dev

Pagespeed Insights is a website performance optimization tool, as well as providing a detailed assessment of your website, developed by the Google team.

Users can receive reports on Website performance on both desktop and mobile. In addition, this tool will also provide users with suggestions to optimize the website through CrUX (Chrome User Experience Report) and reports on two important speed metrics: First Contentful Paint (FCP) and DOMContentLoaded (DCL)



EVALUATION CRITERIA

- Websites should limit the use of redirects on the destination page
- Need to enable data compression function before sending to the browser.
- Server response times should be made as fast as possible
- The browser cache function should be expanded.
- CSS and Javascript resources present on the website must be unpacked.
- Reduce website size by compressing image sizes
- The process of inserting CSS folders into the website needs to be strictly optimized.
- The order of content priority on the website must be established clearly and specifically.
- Remove Javascript and CSS blocking before page loads.
- Make the most of asynchronous properties.

HOW TO IMPROVE PAGE LOADING SPEED?

SOME WAYS TO IMPROVE YOUR PAGE SPEED

Compress Your Images

Minify JavaScript, CSS, and HTML

Enable Browser Caching

Use a Content Delivery Network (CDN)

COMPRESS YOUR IMAGES

Images are what contribute to your website loading slowly. Choose images that are the right size and optimal resolution for your website

There are many tools to help you change the size, quality, and resolution of your images such as: Photoshop, Illustrator, reducesize.com (as free to use) or [PicResize](https://picresize.com/) (free to use) etc.

Choose the right image format because different image types require different image file formats. Let's analyze the most popular formats and how to use them: JPEG, PNG, GIF or WebP

MINIFY JAVASCRIPT, CSS, AND HTML

According to John Mueller (from Google) , minification is worth considering because it can reduce file size

Cut unnecessary white spaces or lines of code to refine the website's code source, thereby significantly reducing page loading speed and user experience.



STANDARD CSS CODE

```
body{
  width: 800px;
  margin: auto;
  font-family: 'Montserrat', sans-serif;
  color: #2f2f2f;
}
img{
  width: 800px;
  margin: auto;
  margin-bottom: 20px;
}
#menu{
  display: flex;
  justify-content: space-around;
  align-items: center;
  border-bottom: 2px solid #e0e0e0;
  list-style: none;
}
```

AFTER REDUCE

```
body{width: 800px;margin: auto;font-family:
'Montserrat', sans-serif;color: #2f2f2f;}
img{width: 800px;margin: auto;}#menu{display:
flex;justify-content: space-around;align-items:
center;border-bottom: 2px solid #e0e0e0;list-
style: none;}
```

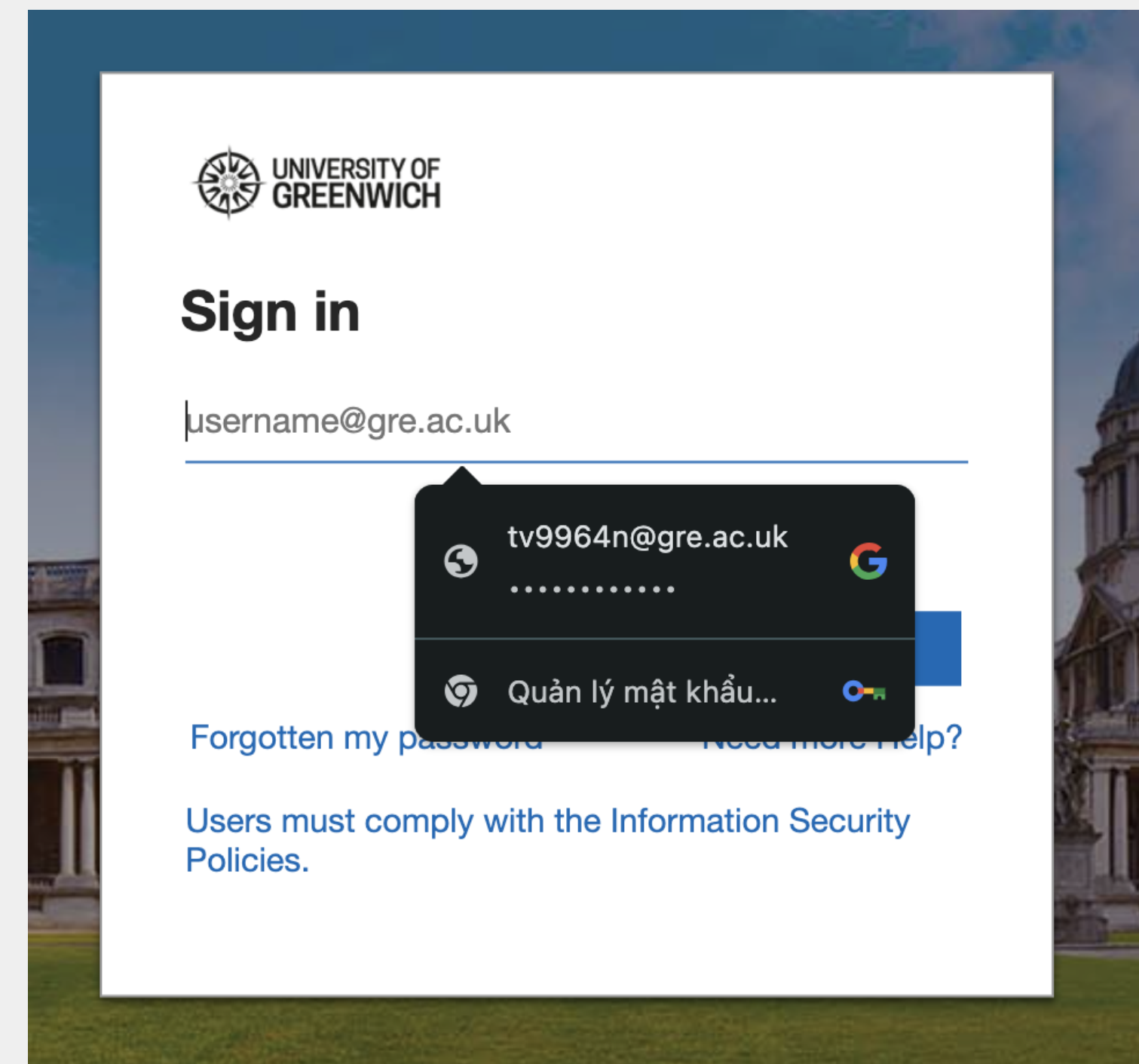
Minified source code looks terrible and difficult to read for humans or web developers, but it is easier to read and process for computers and this is a way to shorten the source code to improve page speed

ENABLE BROWSER CACHING

Browser caching is a way for websites to remember user data when accessing the website for the first time, so that when the user returns to visit the second time, it will be processed faster.

Every time a user visits a website, their browser will remember the data previously entered by the user, and the next time the website will suggest data that has been previously entered.

Example



USE A CONTENT DELIVERY NETWORK (CDN)

Content Delivery Network is a distributed network of servers strategically located across various geographic regions

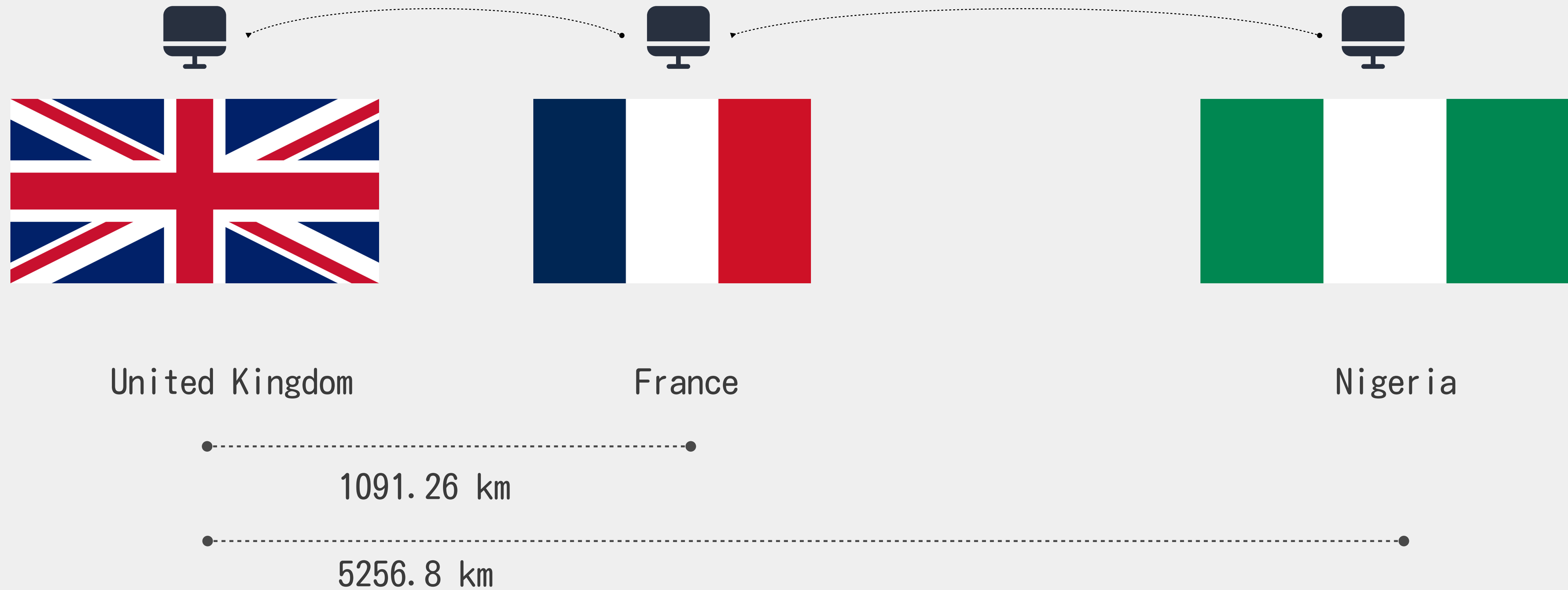
Purpose is to enhance the performance and reliability of delivering web content to users

By caching content in servers closer to users, CDNs reduce latency, accelerate page load times, and improve overall website performance

CDN allows for the quick transfer of assets needed for loading Internet content, including HTML, Js files, stylesheets, images, and videos.

USE A CONTENT DELIVERY NETWORK (CDN)

Example



moz. com about pagespeed

[https://moz.com/learn/seo/page-speed#:~:text=You%20can%20evaluate%20your%20page,%20\)%20and%20DOMContentLoaded%20\(DCL\).](https://moz.com/learn/seo/page-speed#:~:text=You%20can%20evaluate%20your%20page,%20)%20and%20DOMContentLoaded%20(DCL).)

document about pagespeed from Google

<https://developers.google.com/speed/docs/insights/v5/about>

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HOPE YOU CAN CATCH THAT!

S e m i n a r t o p i c s