

## **PRACTICAL-2**

### **AIM:**

How your site performs, reveal why it's slow and discover optimization opportunities with GTMetrix.

### **SOFTWARE REQUIRED:**

Google Chrome and Microsoft Edge to open GTMetrix official website.

### **BACKGROUND KNOWLEDGE REQUIRED:**

Basic knowledge and understanding of Software Engineering.

### **THEORY:**

Introduction to GTMetrix:

- Developed by the parent company GT.net.
- It is probably one of the most well-known and used speed testing tools on the web today! In fact, the reason we are writing this is that we have a lot of Kinsta customers that are always asking us how to follow the advice they see on their GTmetrix reports. Compared to other developer tools, GTMetrix is pretty easy to use and the beginner can pick it up pretty quickly.

Features:

- Track performance with monitoring, graphs, and alerts.
- Get summary of key performance indicators.
- Test the page from multiple regions.
- Save report data.
- Connection Throttling.
- Cookie Sessions.
- HTTP Authentication.
- E-mail Digests.

Advantages:

- Compare the site's performance.
- Review the site's performance.
- Improve the site's performance.
- We can analyze our page using both services i.e. PageSpeed and YSlow.

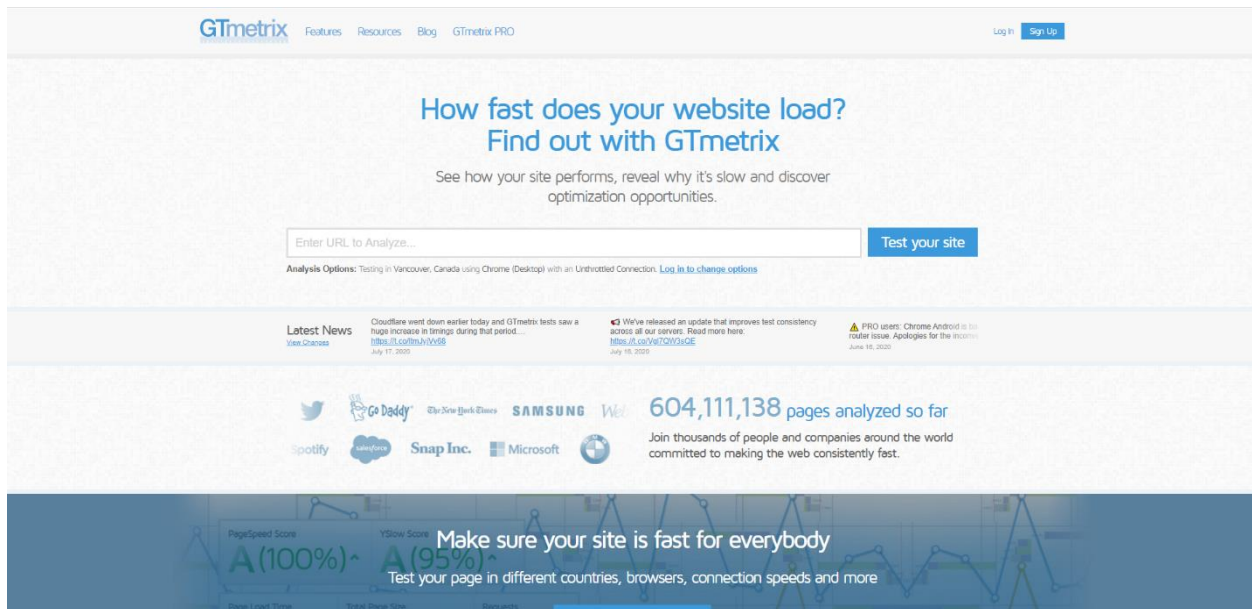
- Limitations:

Limited Speed tests.

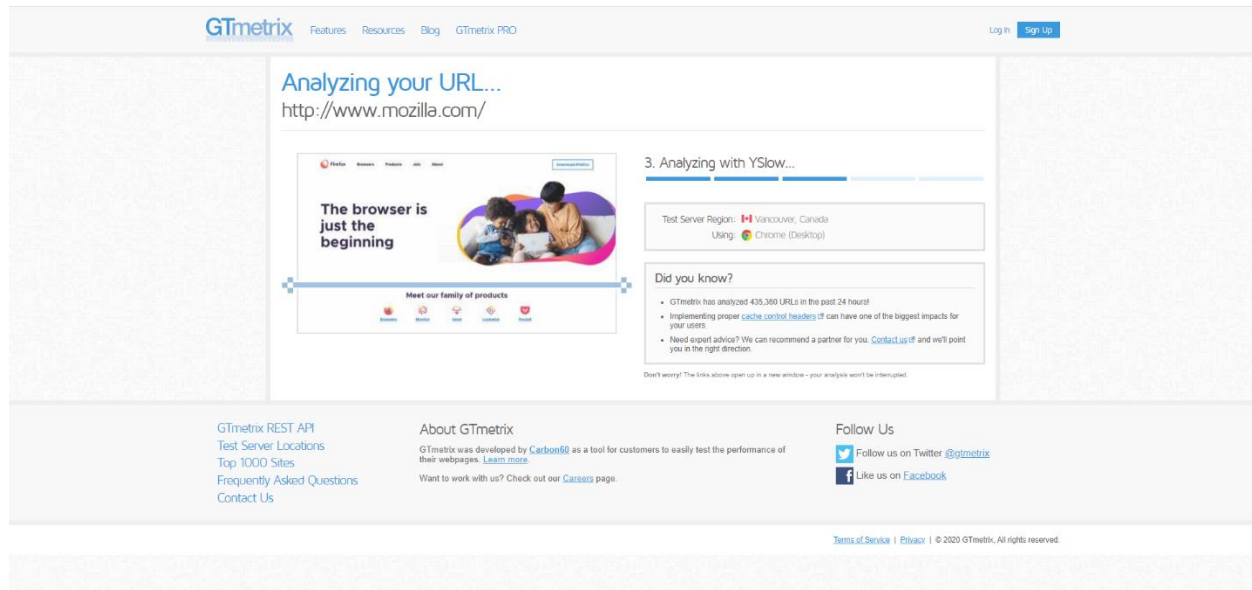
- Image dimensions supplied through CSS cannot be detected leading to a wrong speed test report.

## IMPLEMENTATION/SCREENSHOTS:

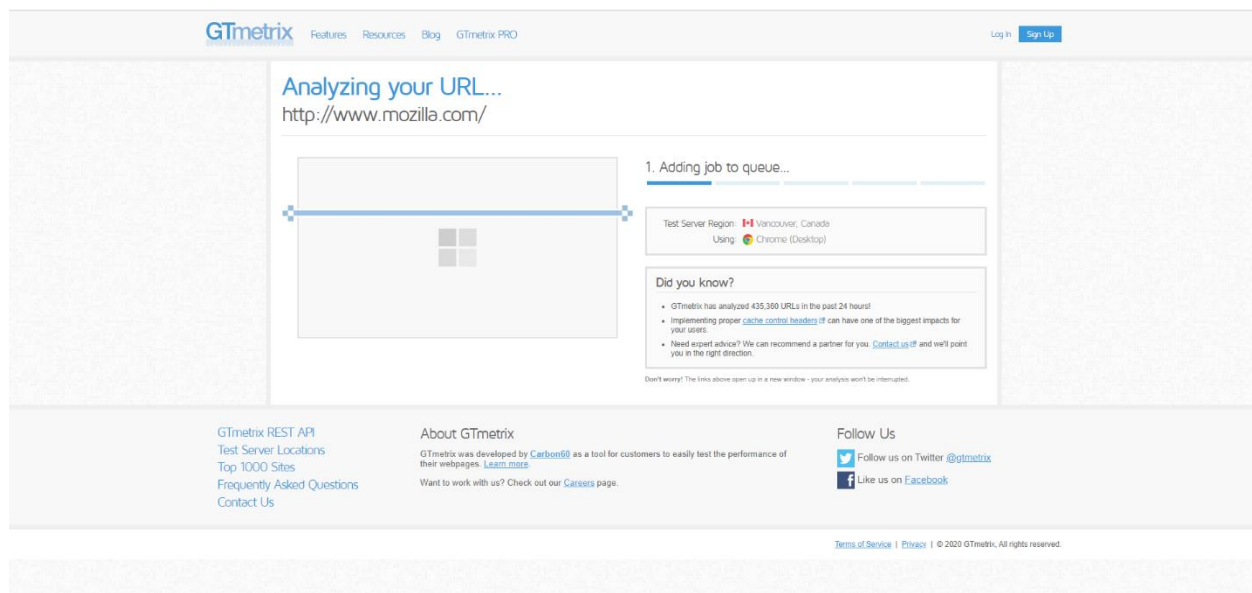
- Using Google Chrome:



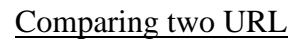
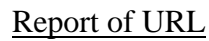
### Home Page



## Analyzing with YSlow



## Adding job to queue



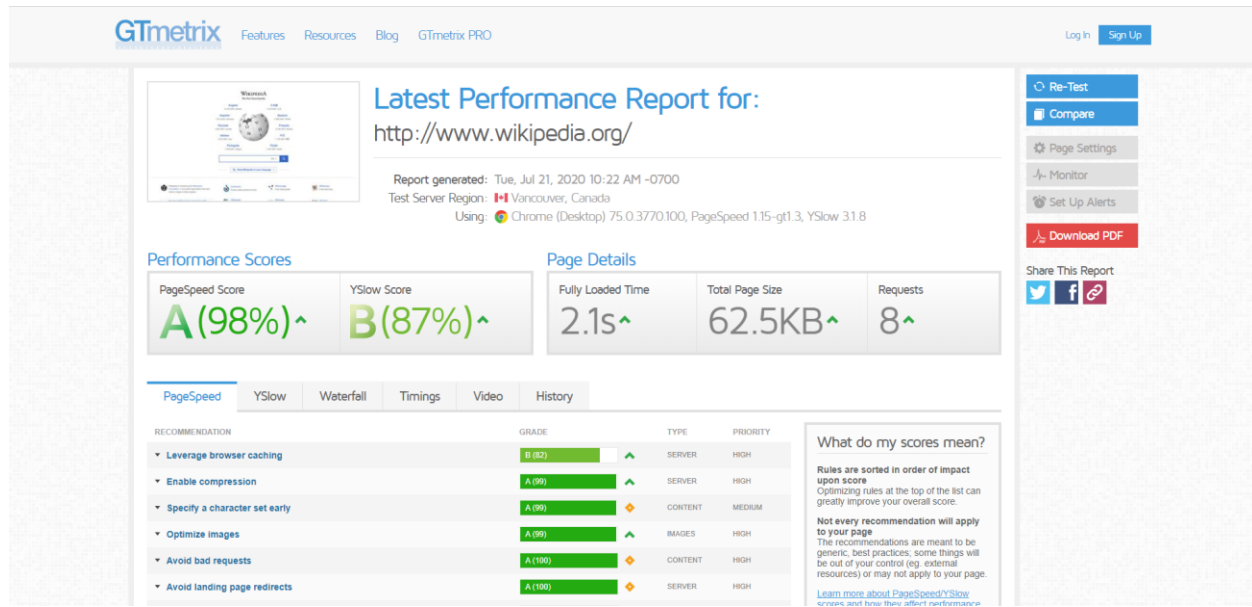
- Using Microsoft Edge:

The screenshot shows the GTmetrix website interface. At the top, there's a navigation bar with links for Features, Resources, Blog, and GTmetrix PRO. A 'Log In' and 'Sign Up' button are on the right. The main heading is 'Analyzing your URL...' followed by the URL 'http://www.mozilla.com/'. Below this, there's a large placeholder image for the website being analyzed. To the right, a progress bar indicates '2. Fetching site...'. Below the progress bar, it shows 'Test Server Region: Vancouver, Canada' and 'Using: Chrome (Desktop)'. A 'Did you know?' section provides tips on server speed, JavaScript placement, and expert advice. At the bottom, there are links for GTmetrix REST API, Test Server Locations, Top 1000 Sites, and Frequently Asked Questions. Social media links for Twitter and Facebook are also present.

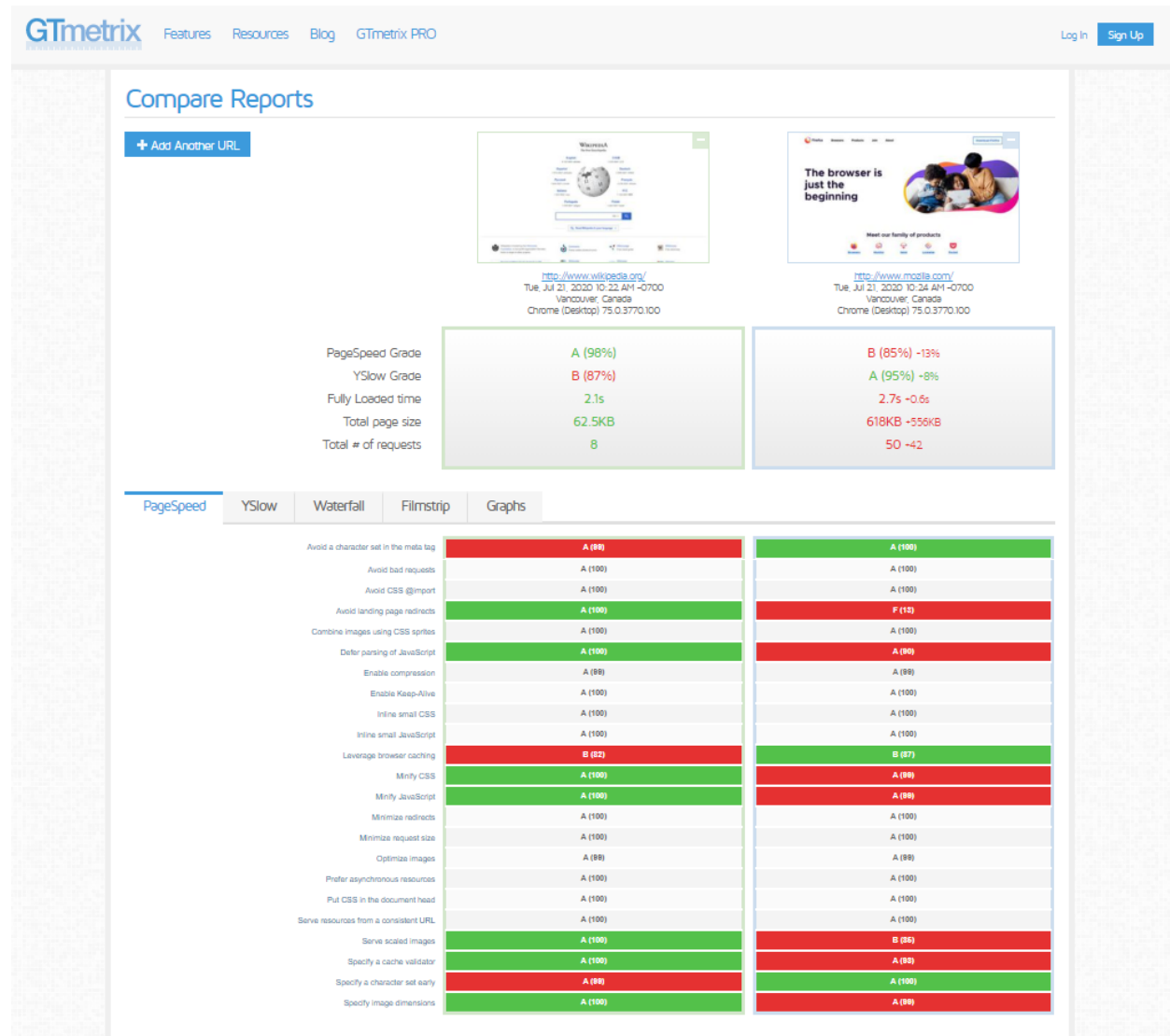
## Fetching Site

The screenshot shows the GTmetrix website interface. At the top, there's a navigation bar with links for Features, Resources, Blog, and GTmetrix PRO. A 'Log In' and 'Sign Up' button are on the right. The main heading is 'Analyzing your URL...' followed by the URL 'http://www.wikipedia.org/'. Below this, there's a large placeholder image for the website being analyzed. To the right, a progress bar indicates '5. Generating report...'. Below the progress bar, it shows 'Test Server Region: Vancouver, Canada' and 'Using: Chrome (Desktop)'. A 'Did you know?' section provides tips on JavaScript placement, expert advice, and a statistic about the number of URLs analyzed. At the bottom, there are links for GTmetrix REST API, Test Server Locations, Top 1000 Sites, and Frequently Asked Questions. Social media links for Twitter and Facebook are also present.

## Generating Report



### Report of URL



### Comparing two URL

### CONCLUSION:

From this practical, I understood to analyze how a website performance tool works as well as come across the website performance parameters on which the website performance is determined.

### REFERENCES:

<https://gtmetrix.com/>