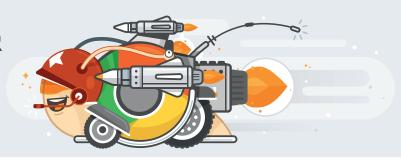


### MAKE YOUR WEBSITE FASTER

A cheat sheet presented by **Tower** - Version control with Git made easy



# REDUCING HTTP REQUESTS

### **CHECK FOR 404 ERRORS**

404 errors are quick to get. Check your pages with your browser's "Dev Tools" to make sure all of your requests find their target!

#### **CHECK FOR (UNNECESSARY) REDIRECTS**

Redirects are costly because they cause HTTP requests. Make sure you're only redirecting when absolutely necessary!

#### **CONCATENATE CSS & JAVASCRIPT**

Combining multiple resources in one output file saves expensive HTTP requests. Make sure you don't deliver too many CSS and JavaScript files!

### **COMBINE IMAGES IN SPRITE FILES**

Instead of delivering each graphic asset in its own file, you can bundle them in a single file. "Image Sprites" help reduce HTTP requests and are ideal for smaller graphic files like icons and logos.

Learn more about how to "Reduce HTTP Requests"

### **WORKING WITH IMAGES**

### **GET RID OF IMAGES**

Can you reduce the number of image files by:

- · using CSS?
- · using WebFonts?
- · eliminating images that you don't need at all?

#### **USE THE RIGHT IMAGE FORMAT**

Make sure your images are saved in the format that best suits the use case:

- SVG is best suited for geometric shapes
- JPG is ideal for photos & screen shots
- PNG allows for transparency & maximum quality

### **INCLUDE RESPONSIVE IMAGES**

Different devices, with different screen sizes and pixel densities, demand for different *versions* of an image. Modern techniques allow you to deliver the optimal image while using as little bandwidth as possible.

### **OPTIMIZE IMAGES**

Saving an image from Photoshop, Illustrator, or other design tools is not the end of the story. In most cases, you still have lots of room for optimization.

Make sure your image assets use the best compression algorithms and the smallest file sizes!

Learn more about "Working with Images"



## We make Tower

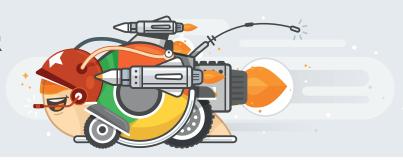
...the best Git client for Mac & Windows.

We help over 80,000 users in companies like Apple, Google, Amazon, Twitter, and Facebook to easily & productively work with the Git version control system.



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### DELIVERING FILES FASTER

### **CONFIGURE HTTP CACHING**

Do you allow your files to be cached by the user's browser? A lot of optimization potential is at your fingertips when using "HTTP Caching" effectively.

### **ENABLE GZIP COMPRESSION**

Delivering your files with GZIP compression is easy to implement - and yet very effective. Make sure your web server delivers your files the right way.

### **SET UP A CDN**

The geographical distance between a server and a visitor's computer matters. Consider using a Content Delivery Network to always serve your files from as close as possible.

Learn more about "Delivering Files Faster"

## **OPTIMIZING CSS & JS**

### **CSS & JAVASCRIPT IN EXTERNAL FILES**

Keeping CSS and JavaScript in (preferably few) external files allows the browser to *cache* them. Take advantage of this!

#### **MINIFY CSS & JAVASCRIPT**

Make sure your CSS and JavaScript is delivered with as little "air" as possible: white space, comments, etc. are not necessary for the browser to understand your code. Minification helps ship the leanest file possible.

### **OPTIMIZE CSS LOADING**

Including CSS in your HTML pages can be done the "right" or the "wrong" way. Make sure:

- CSS is included right at the top
- · @import is not used in your CSS
- · only CSS that is really necessary is delivered

### **OPTIMIZE JAVASCRIPT LOADING**

The way you include JavaScript in your pages might slow them down. Make sure you:

- load JavaScript libraries from Google's Hosted Libraries CDN
- load them with the "async" attribute or at least only at the bottom of your HTML
- don't load third-party libraries multiple times!

Learn more about "Optimizing CSS & JavaScript"



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