Web Developer

HTML, CSS e Strumenti di Digital Marketing (SEO, SEM, SEA)

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Performance & security

Technical seo

Shadi Lahham - Web development

Page load speed

Page load speed

website performance, particularly page load speed, is critical for both user experience and SEO

Google considers page speed as a ranking factor, and slow pages often lead to higher [bounce rates](#)

a poor user experience from slow load times can result in less engagement, which negatively impacts SEO

Page load speed

Minimize CSS and JavaScript
use minification tools JavaScript and CSS to remove unnecessary characters and comments and reduce the amount of data a browser needs to load

Compress images
use tools like Squoosh to optimize images without significant quality loss and use modern formats like WebP, which offer better compression than JPEG or PNG

Understand above the fold
above the fold refers to content visible without scrolling; while it doesn't directly impact SEO, it influences user psychology and first impressions, affecting bounce rates and user engagement

Implement Lazy Loading
apply lazy loading techniques to non-critical resources below the fold like images, scripts, CSS, etc. This defers loading until needed, improving initial load times and saves bandwidth on slow connections

Page load speed

Use CDNs
content delivery networks, like Cloudflare or AWS CloudFront, distribute content across multiple servers worldwide, serving users from the closest server, reducing latency and improving global page load speeds

Optimize for mobile
implement responsive design for various screen sizes, use adaptive images that load appropriate sizes for different devices, ensure touch-friendly elements for mobile users and optimize font loading

Implement browser caching
configure Cache-Control headers to define how long resources should be cached to allow browsers to store copies of resources locally, reducing reload times on subsequent visits

Monitor performance
use Google PageSpeed Insights to evaluate website performance across desktop and mobile devices. The tool provides a score out of 100 and highlights areas that need improvement, such as render-blocking resources or unused CSS

Server performance

Server performance

optimizing server and hosting settings ensures better page performance and security

Optimize server response time
reduce the time taken for the server to respond to a request by minimizing database queries, implementing server-side caching and purchasing a powerful hosting solution

Monitor uptime
frequent downtimes negatively impact SEO because search engines de-rank sites that are often unavailable, so use tools like <u>UptimeRobot</u> to ensure that your website is consistently available

Security

Security

HTTPS and SEO
HTTPS improves trust with users and serves as a ranking signal for Google.

transitioning to HTTPS involves installing an SSL certificate and ensuring all URLs and resources are correctly migrated from HTTP to HTTPS to prevent mixed content issues

SSL Certificates
an SSL certificate encrypts data between the server and the user's browser, ensuring secure data transmission. Google flags sites without SSL as "not secure" while ranking HTTPS sites higher than HTTP ones

Self signed certificates
self-signed certificates can be used for testing purposes to use HTTPS in a development environment, but should never be used in production

Security

Guides

[guide to configuring a self-signed ssl certificate](#)

[creating a self-signed ssl certificate](#)

[create your own ssl certificate for local https development](#)

Generators

[online self-signed ssl certificate generator tool](#)

[generate self-signed certificate online](#)

Try

use one of these tools, or an equivalent online tool, to generate a certificate and setup an Apache server with SSL

Tools

online self-signed ssl certificate generator tool

generate self-signed certificate online

Guides for Apache

How to install ssl certificate on apache server?

Apache: create csr & install ssl certificate (openssl)

SSL/TLS strong encryption: how-to - apache http server version 2.4

Analytics

Analytics

[Google Analytics](#) offers key insights into website performance and user behavior, facilitating data-driven decisions for optimizing SEO, improving underperforming pages, and refining conversion funnels

demographics
includes user age, gender, location, and the type of device they are using

behavior
tracks user interactions such as bounce rate, time spent on a page, and total page views

conversions
tracks use completion of significant actions like form submissions or making purchases