**SEO and Web Performance Analysis: Pazcare**

**Task 1: Site Audit**

I have taken a closer look at the website of Pazcare and found a few things we would like to see changed. Here is a list of what we think should be changed.

**1. Core Web Vitals Issues**

One thing that really stung us was the very poor LCP score. To improve this we can optimize the images by using next-generation formats (like WebP) and by caching. The tools like Google PageSpeed Insights and Lighthouse will really help you in finding areas of optimization.

**2. Crawlability Issues**

We also found that the website does not have a sitemap. xml file and that the sitemap is incomplete. We need to create a full sitemap. xml file and properly configure robots. txt to correct these problems. Screaming Frog and Google Search Console will be our go-tos for this.

**3. Indexation Problems**

Another problem I ran into was duplicate content because we didn't add canonical tags to the pages. So in order to fix this I will apply canonical tags to all of the pages and I will do that with Screaming Frog and Google Search Console.

**4. Security Concerns**

The website is currently showing mixed content warnings and has an out of date SSL configuration. To resolve this I will need to update the SSL certificate and resolve any mixed content issues (SLS Labs and Security Headers will be very helpful in discovering and rectifying these issues).

**5. Mobile Responsiveness**

Finally the website’s mobile usability score is poor. I will have to follow responsive design guidelines and optimize the website for mobile. Google’s Mobile-Friendly Test and Search Console will help us with that.

**Task 2: Web Development**

**1. Image Optimization**

This is very important to speed up the load time of the webpage and thus improve the Core Web Vitals score, so in Webflow we can enable lazy loading for images.

**2. CSS/JS Optimization**

Reducing the render-blocking resources is a key part of reducing website load time. In Webflow we can enable minification for CSS and JS files to do just that.

**3. Structured Data Implementation**

Adding structured data will help search engines better understand our website's content. We can use JSON-LD in Webflow's custom code section to make it happen.

**4. Meta Tags Optimization**

Well put together meta tags also give better clickthrough rates and search visibility. In Webflow we can use SEO settings to add proper title tags and meta descriptions.

**5. Font Optimization**

Finally optimizing the fonts will help reduce render blocking resources. In Webflow the font display swap is what 's going to do.

**Task 3: Problem Solving**

Let's tackle the issue of a blog page taking over 9 seconds to load. I have identified the main culprits: render-blocking JavaScript, large unoptimized images, and unnecessary HTTP requests. Here's how i will fix it:

**Step 1: Tackle Render-Blocking JavaScript**

To start, we'd minify and compress our JavaScript files using tools like UglifyJS or Terser. This will reduce the file size and make them load faster. Next, we'd use asynchronous loading by adding the async or defer attribute to our script tags. This way, the JavaScript files won't block the rendering of the page. Finally, we might consider using a Content Delivery Network (CDN) to reduce the distance between our users and our server.

**Step 2: Optimize Those Large Images**

Now, let's talk about images. We'd compress them using tools like TinyPNG or ImageOptim to reduce their size without sacrificing quality. We might also consider using next-gen formats like WebP, which offer better compression than traditional formats. And to take it a step further, we'd implement lazy loading, so images only load when the user scrolls to them.

**Step 3: Reduce Unnecessary HTTP Requests**

To reduce HTTP requests, we'd merge multiple CSS or JavaScript files into a single file. We'd also use CSS sprites to combine small images into a single sheet. And finally, we'd go through our code and remove any unnecessary resources, like unused CSS or JavaScript files.

**Tools of the Trade**

To analyze the page's performance and identify areas for improvement, we'd use tools like Google PageSpeed Insights, Lighthouse, and WebPageTest. These tools will give us a clear picture of what's going on and help us track our progress.

By following these steps and using the right tools, we should be able to significantly improve the page's loading time