Performance testing

For performance testing I am using google lighthouse to audit a number of pages in my web application. I will list a number of issues I encounter and potential or applied fixes.

# General

One of the recurring warnings across multiple pages is to reduce unused JavaScript this seems to be coming from one of the files that were added when creating a basic react app via command line.

These files also seem to be giving a warning for serving static assets.

Another recurring warning is a background and foreground colour contrast ratio. This seems to be coming from a blue link text to the shopping cart within the navbar component being too similar to the light-blue background colour of the navbar. This is fixed by change the colour of the link.

If one of the images for a product or category is not found on the external site the error message is logged to the console. This seems to be an issue with google chrome that can not be turned off.

The application also does not register a service worker which is a technology that allows the app to use Progressive Web App features (PWA). This will not be added in this semester.

## Homepage

The list with links on the homepage contains elements that don’t match the expected pattern (<li>, <script> and <template>). This was because I put a direct link in the list without wrapping in a <li> element this has been fixed.

## Inventory (products/categories page)

Suggestion to serve images In next-gen formats (WebP or AVIF). I am pulling the images for my current application from external resources which does not give me control of which file extension is used.

Image elements do not have an explicit height and width. Setting these reduces layout shifts. This is causing the productname to jump when an image is not found message is shown instead of the actual image.