USING NEXT-GEN IMAGE FORMAT TO ENHANCE YOUR APP'S PERMORMANCE (REACT)

Introduction

Why serve images in WebP format

JPEG 2000, JPEG XR, and WebP are image formats that have superior compression and quality characteristics compared to their older JPEG and PNG counterparts. Encoding your images in these formats rather than JPEG or PNG means that they will load faster and consume less cellular data.

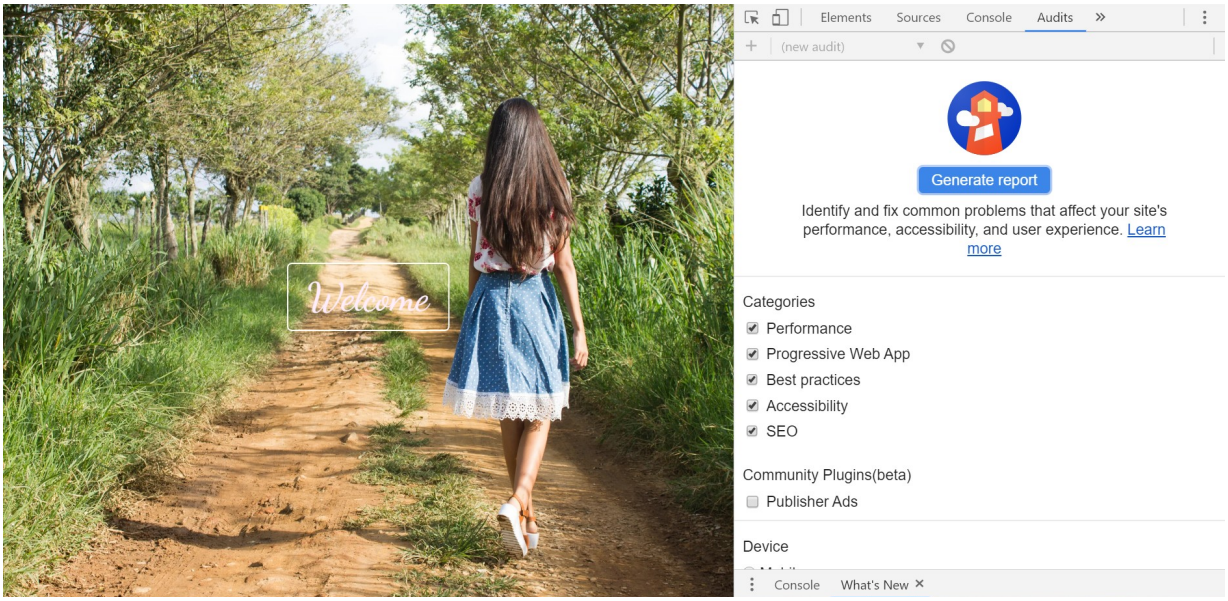
WebP is supported in Chrome and Opera and provides better lossy and lossless compression for images on the web. See A New Image Format For The Web for more on WebP.

Source: https://web.dev/uses-webp-images/?utm_source=lighthouse&utm_medium=devtools

Lighthouse

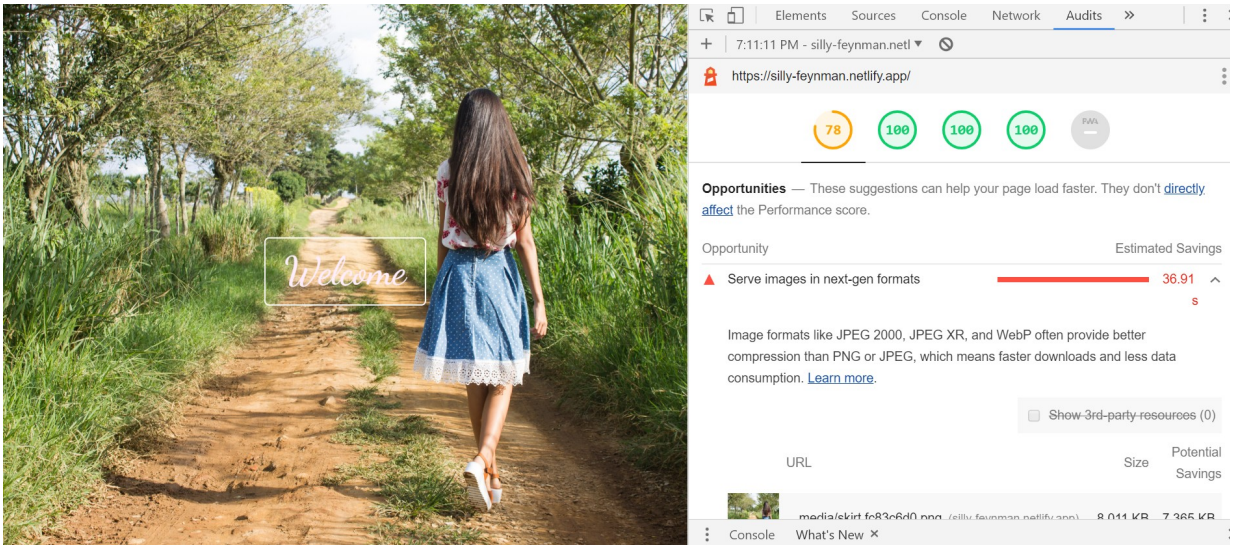
For best results, run Lighthouse in incognito mode. While in Chrome, run <Control> + <Shift> + N to open incognito mode. Then, go to your URL, open the developer tools, and select Audits.

Click on “Generate report”.



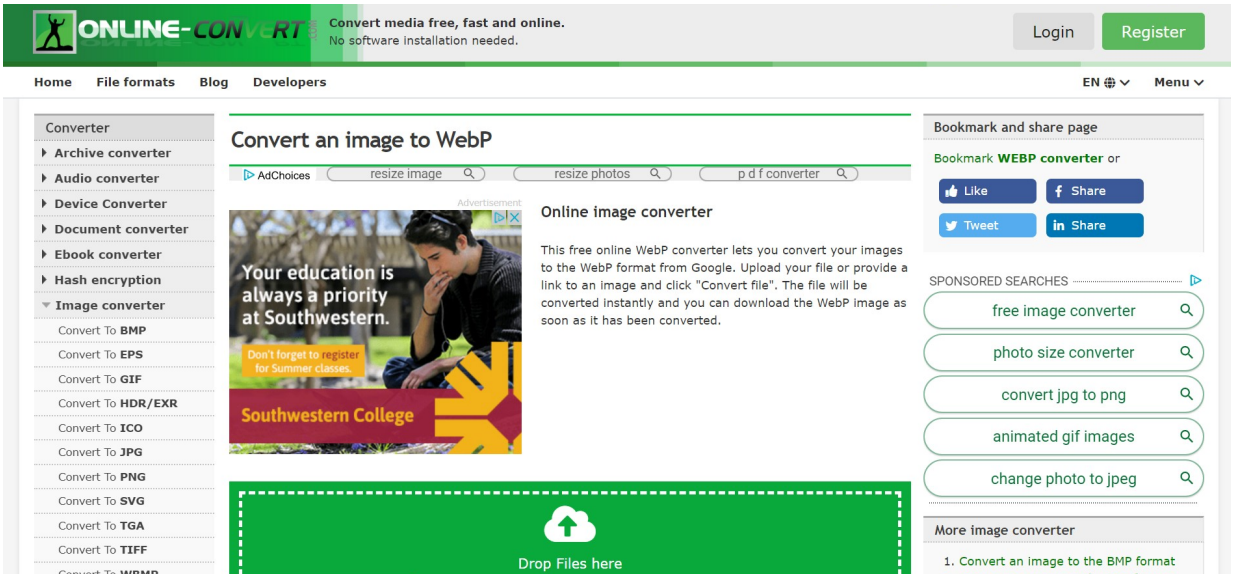
The Problem

If you have a large image in either **.jpg** or **.png** format (the image in the screenshot is 2246 x 1473 pixels in size), it will take a long time to load. As you can see, Performance in Lighthouse is 78%, and it took 36.91 s to load. Lighthouse suggests serving images in next-gen formats.

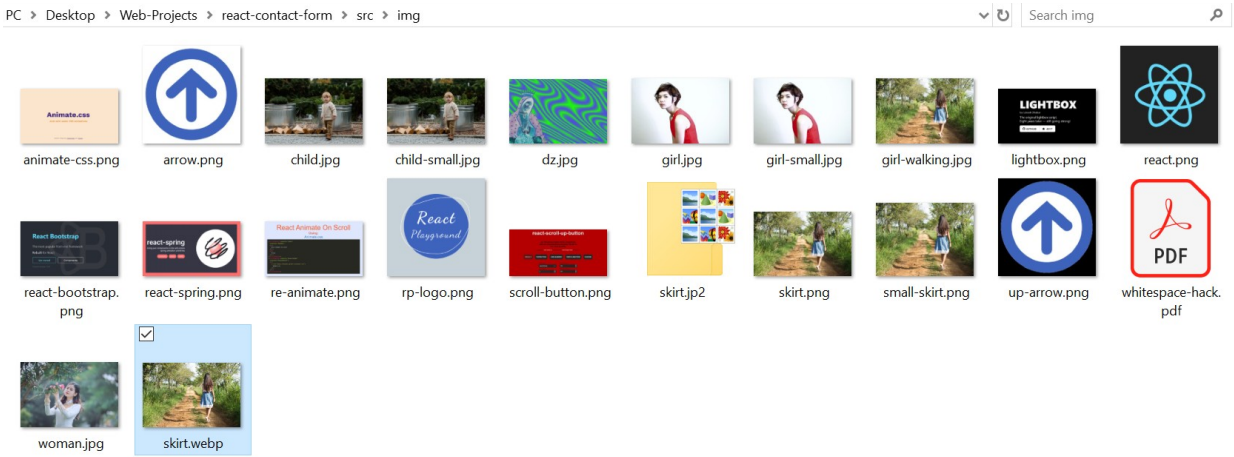


What To Do

1. First, convert your image from **.jpg/.png** to a next-gen format using an online converter like this one: https://image.online-convert.com/convert-to-webp
   In this example, we're using this converter to convert from **.png** to .**webp.**



2. After converting the image into a **.webp** format, put the image into the appropriate folder. In this case, it has been placed in the **img** folder.



3. Import the image with the new **.webp** extension (line 5).

```
1   import React from 'react';
2   import { Container, Row, Col } from 'react-bootstrap';
3   import { Helmet } from 'react-helmet';
4   import Fade from 'react-reveal/Fade';
5   import skirt from '../../img/skirt.webp';
6
7   const Home = () => {
8     return (
```

4. And that's it. Now it should work.

5. The load time should now be faster. And when checking on Lighthouse, the Performance score has improved and is now at 90%. And we no longer get the message that suggests serving images in next-gen formats. And now when the pages on your app load, they should load faster.