

@angular/universal - SSR

1. Fast Initial Load and better SEO

@angular/universal - SSR - result

/academeez

- Before diving to @angular/universal it's important to understand the result of learning this chapter...
- FAST INITIAL LOAD
- IMPROVE SEO

Fast Initial Load

- Understanding @angular/universal will improve the initial load of your app
- Specifically we will improve the Largest-contentful paint
 - ▶ LCP - measures when the largest content element in the viewport is rendered to the screen. This approximates when the main content of the page is visible to users

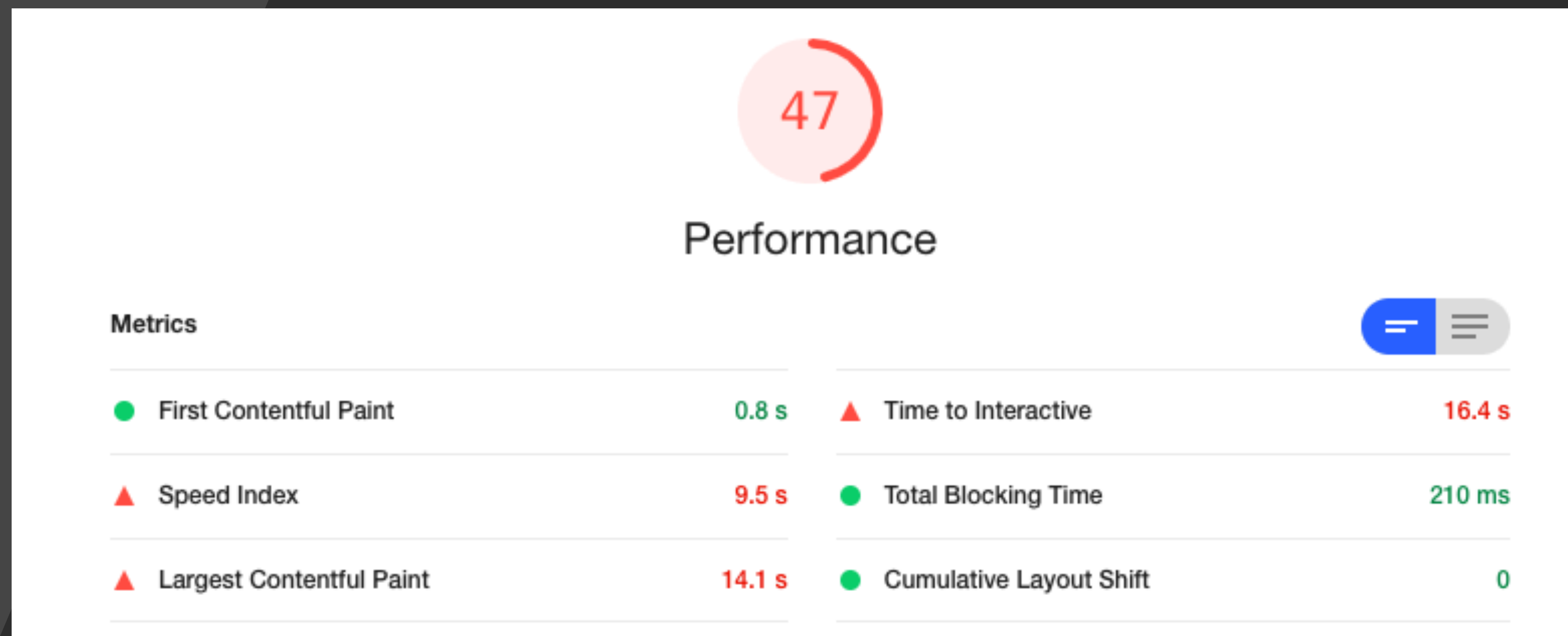
Initial load is slow

- Let's try and measure the current time it takes our app to load
- Create a new project using @angular/cli
- Build that project (without the prod flag to imitate a large application)
- Serve the built project - our app will launch on localhost:8080

```
> npx @angular/cli new ssr-tutorial  
> cd ssr-tutorial  
> npx ng build  
> cd dist/ssr-tutorial  
> npx http-server
```

Lighthouse

- Using lighthouse we can generate a Performance report of our site.
- Open Chrome Developer tools and switch to the **Lighthouse** tab
- Choose **Mobile** and **Performance** and click **Generate Report**



Initial load is !important;

- According to the following study by google:
 - ▶ 53% of visitors leave the site if it takes more than 3 seconds to load
 - ▶ 3 out of 4 top mobile sites takes more than 10 seconds to load
 - ▶ large correlation between page speed and: Revenue, Bounce Rate, Session Duration, Viewability
 - ▶ The study is available here: <https://www.blog.google/products/admanager/increase-speed-of-your-mobile-site-wi/>

Search Engine Optimization - SEO

- SEO - means how high we are displayed in search results for google and other search engines, for a certain search query.
- In simple terms, the higher our SEO the more organic users we will get from search engines.
- Single Page Application sites that renders the content with only the JS files will have a lower SEO rankings.
- SEO is affected by the performance of our site: initial load, bounce rate, session duration
- some search engines do not render javascript
- javascript rendering can fail

- If your app will get organic users from search engines - YOU HAVE TO KNOW @angular/universal
- If your users will lose patience of your site load takes too long - YOU HAVE TO KNOW @angular/universal

Thank You

Next Lesson: 2. Universal/Isomorphic code