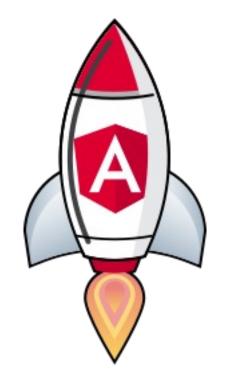


Outline 02 - Initial Load Performance



Assets & Build

Lazy Loading & Deferrable Views

• SSR & SSG



Outline 02c - SSR & SSG

Server-Side Rendering

Hydration

Prerendering

• Alternative: Use a URL cache



Server-side rendering



Server-side rendering (SSR)

- Problem: After download rendering on the client takes too much time
 - Search Engines may not be abled to index the App correctly
- Identify: After .js files have been loaded js main thread takes too long
 - Search Engines don't index correctly
- Solution: Use Angular Universal
 - Page is rendered on the server and then served to the client
 - But only useful for public pages (no user login)



Server-Side Rendering (Angular 16)

New feature called "non destructive hydration"





DEMO – Universal



Prerender important routes (SSG)

• Problem: Server response takes to long cos page has to be rendered

Identify: Long server response time when using Universal SSR

- Solution: Prerender the important pages on the server
 - Built-in Angular Universal since V11
 - Then serve them rendered to the user



DEMO – Prerender



Lab

Server-Side Rendering



Use a (URL) cache

Alternative Solution:

- Of course you could also use an alternative caching solution
 - E.g. Cloudflare or any other CDN



Recap

• Server-Side Rendering

Hydration

Prerendering

• Alternative: Use a URL cache



References

- Angular Architects Blog
 - <u>Server-Side Rendering</u> (Blog series)
- Angular Docs
 - Server-side rendering

