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Initial Load Performance SSR & SSG

Alex Thalhammer

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



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Server-side
rendering



Server-side rendering (SSR)

- Problem: *After download rendering on the client takes too much time*
 - *Search Engines may not be able 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”*



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DEMO – Universal



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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



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DEMO – Prerender



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Lab

Server-Side Rendering



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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



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References

- Angular Architects Blog
 - [Server-Side Rendering](#) (Blog series)
- Angular Docs
 - [Server-side rendering](#)