Scaling your project with Micro-frontends

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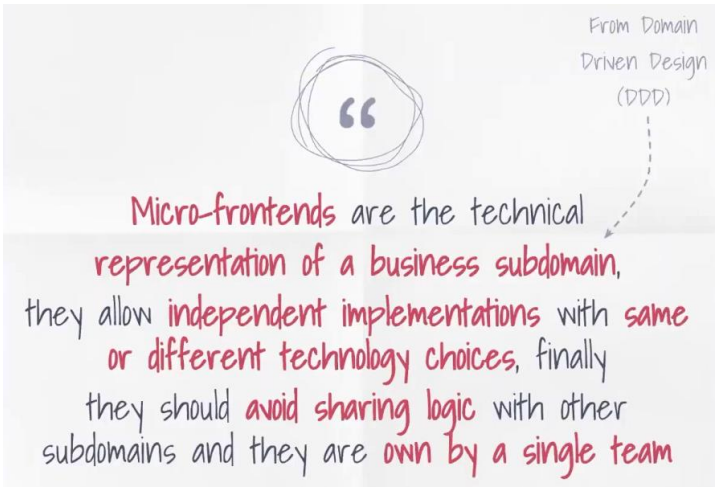
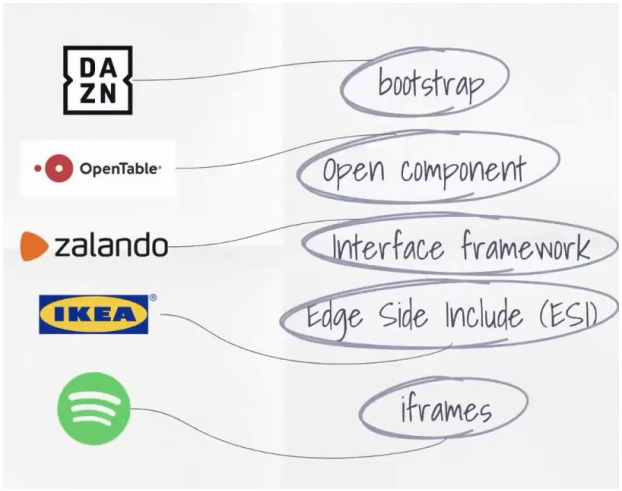
VP of Architecture at DAZN

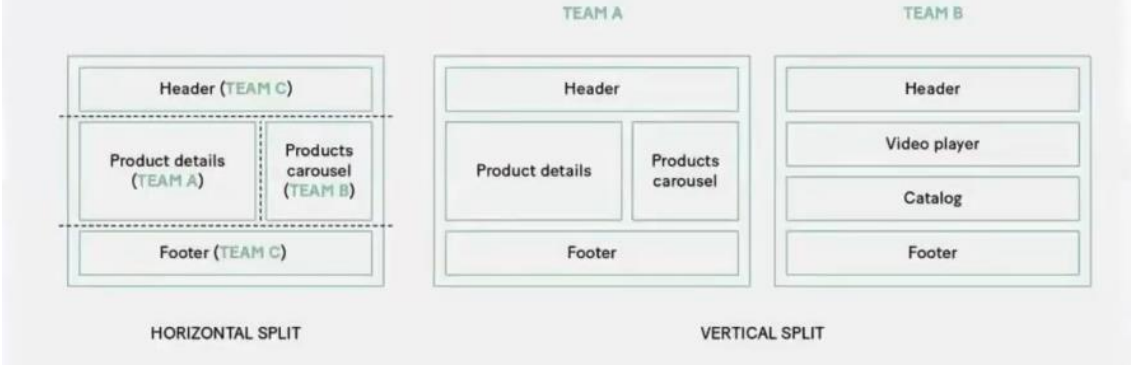




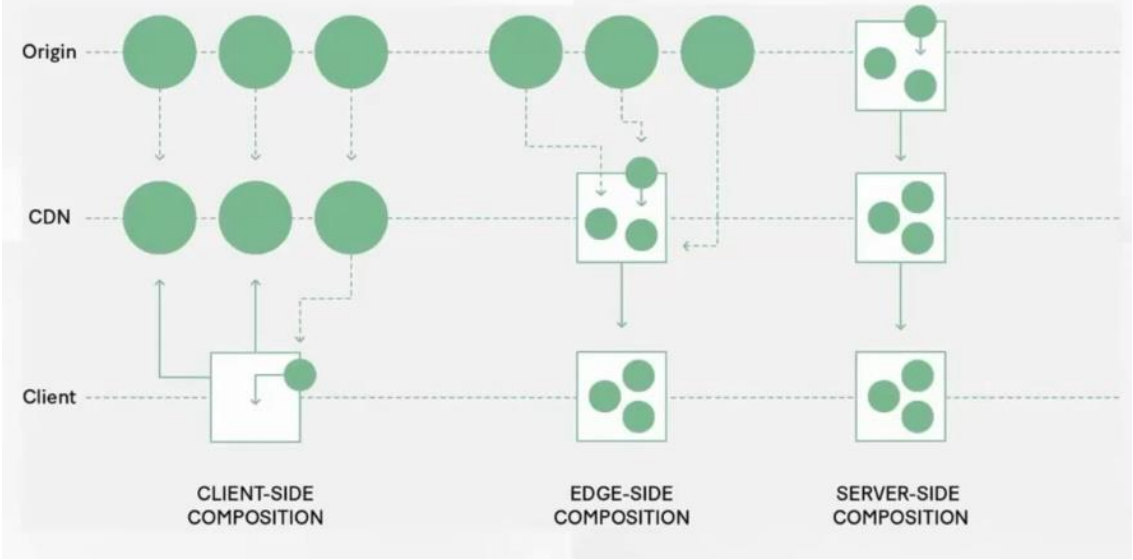
Micro-Frontends Decisions Framework

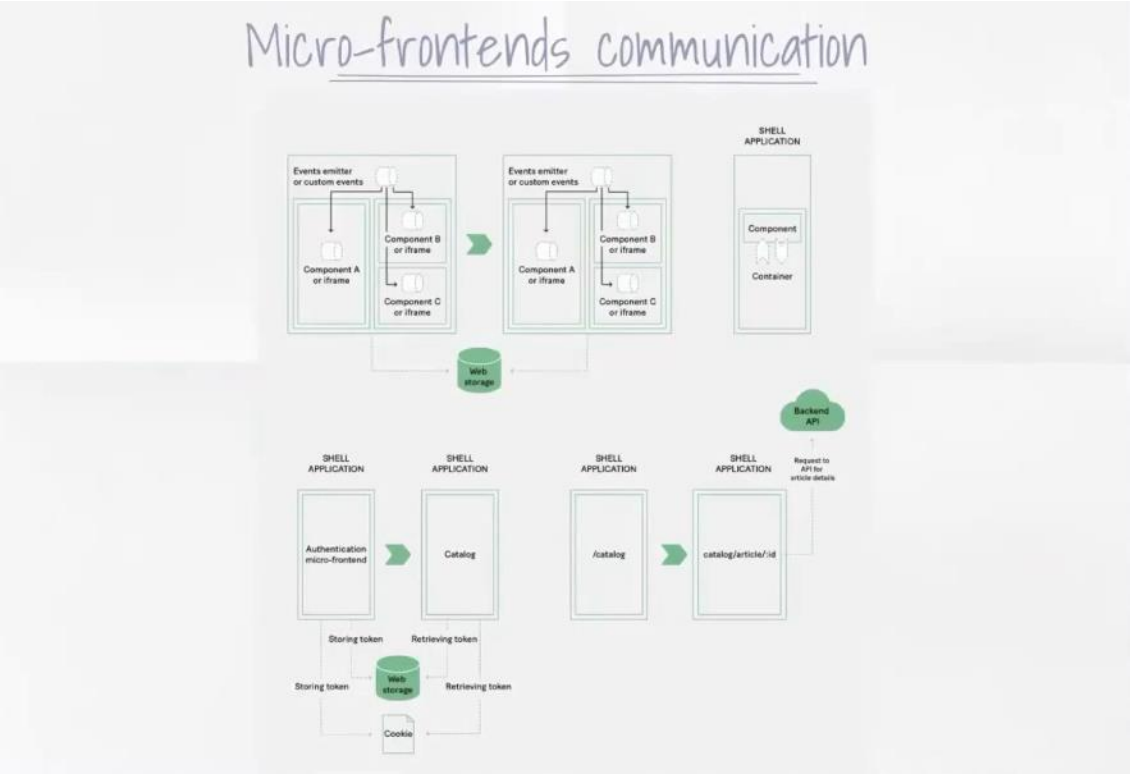
Identify, Compose, Route and Communicate

Identify a micro-frontend

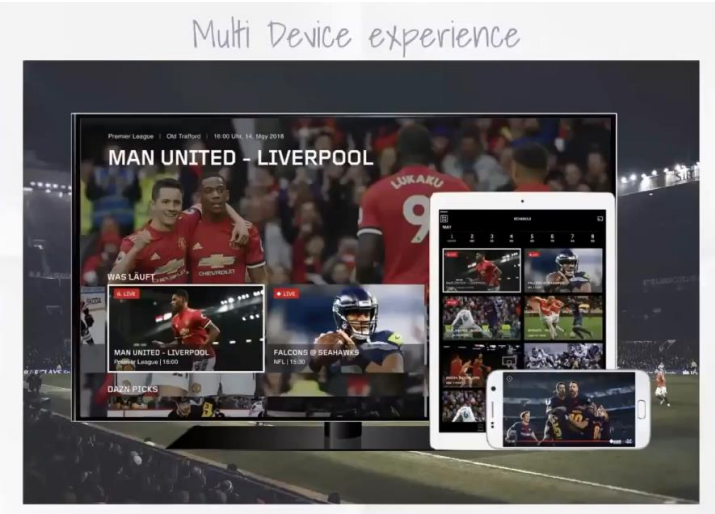


Compose and Route a micro-frontend

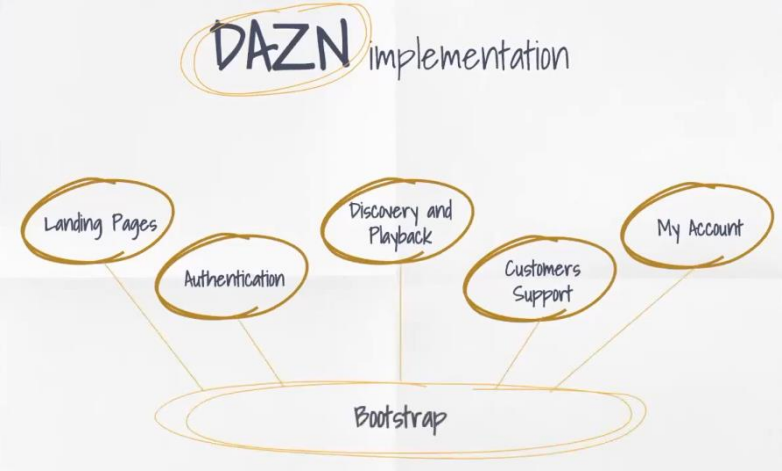




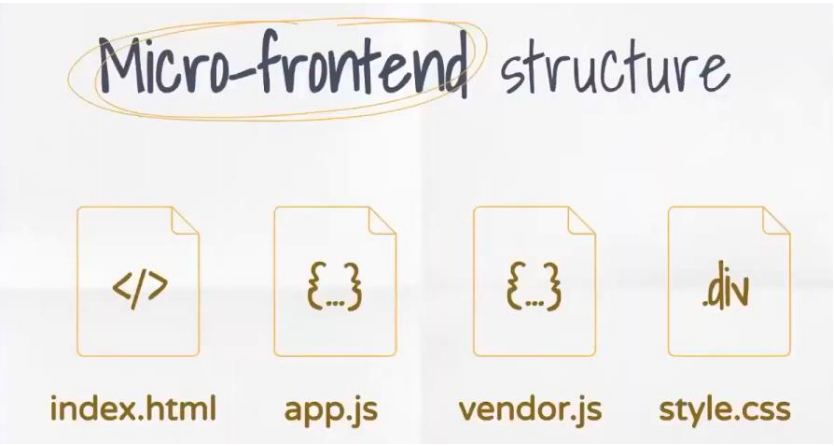
How does MFEs on the same view communicate? You can use events where each MFE has an eventEmitter (MFE-to-Container communication) or custom events (MFE-to-MFE communication. Communication across MFEs on different pages can use web storage (e.g localStorage) or querystrings on the destination URL

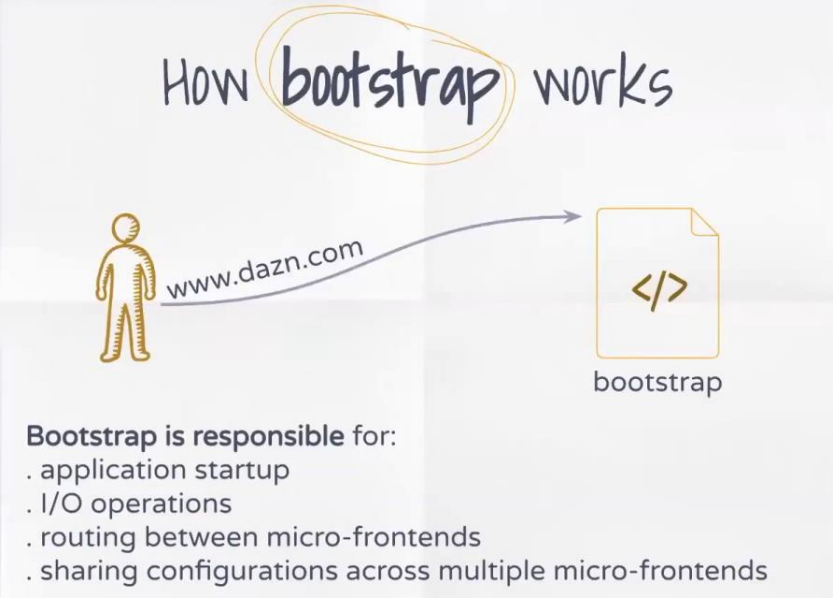


We are currently targeting about 40 different devices with mostly HTML5 and JS.

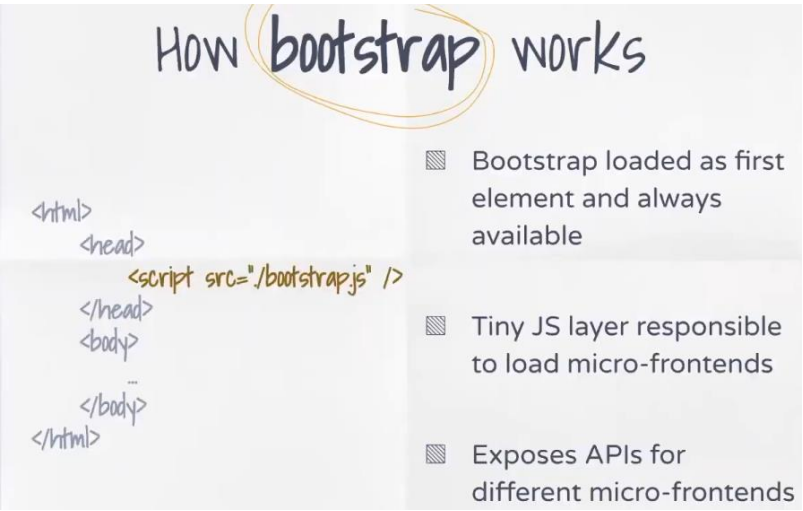


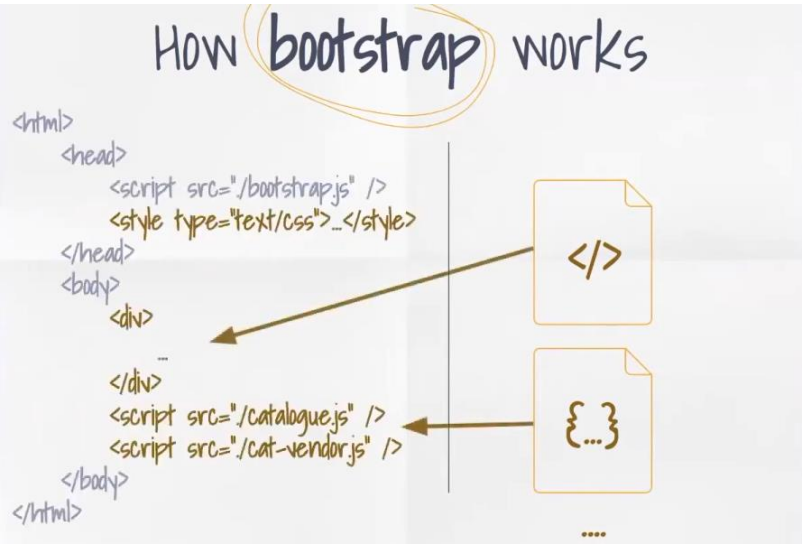
We checked to see patterns of how the users were using our applications. We don’t have to load all the functionalities as a SPA if the users are going to only a few pages or sections only during a visit. We can separate functionalities into MFEs that are loaded as needed.



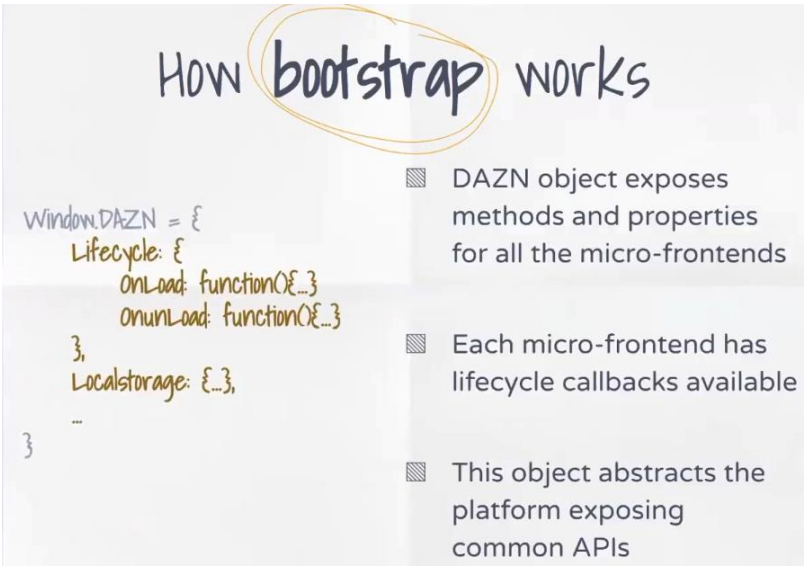


The bootstrap is vanilla JS that is embedded inside the initial index.html page and does things like understanding the country the user is, the device and configuration (has localStorage or not?) they are using, are they authenticated or not (does valid JWT exist in localstorage), and expose an API for the MFE to get data and persist data.

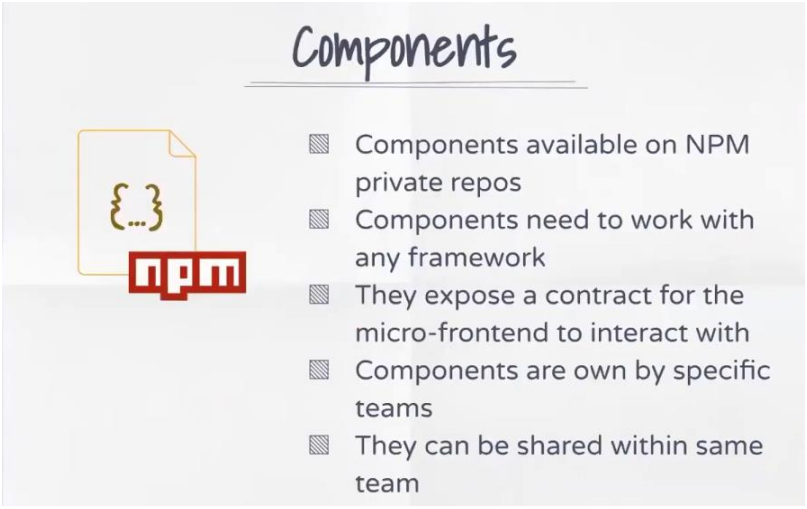




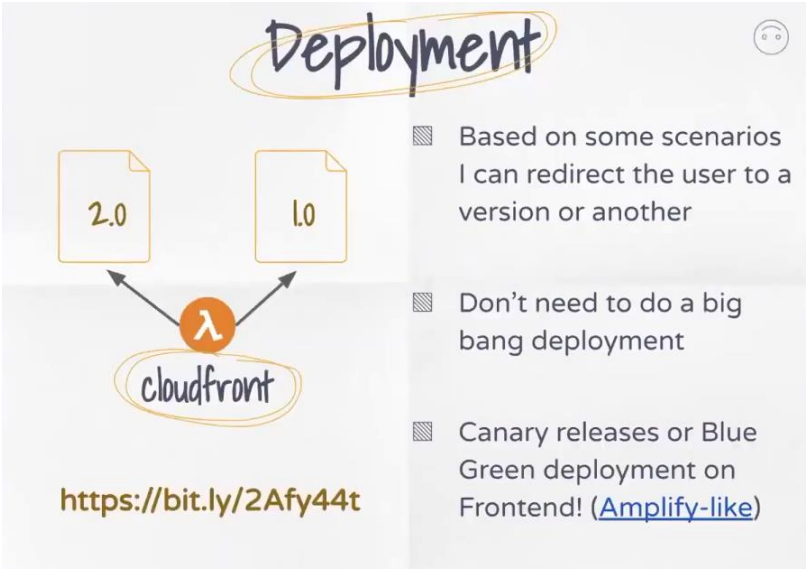
The bootstrap works and then appends the correct styles and MFEs into the page.



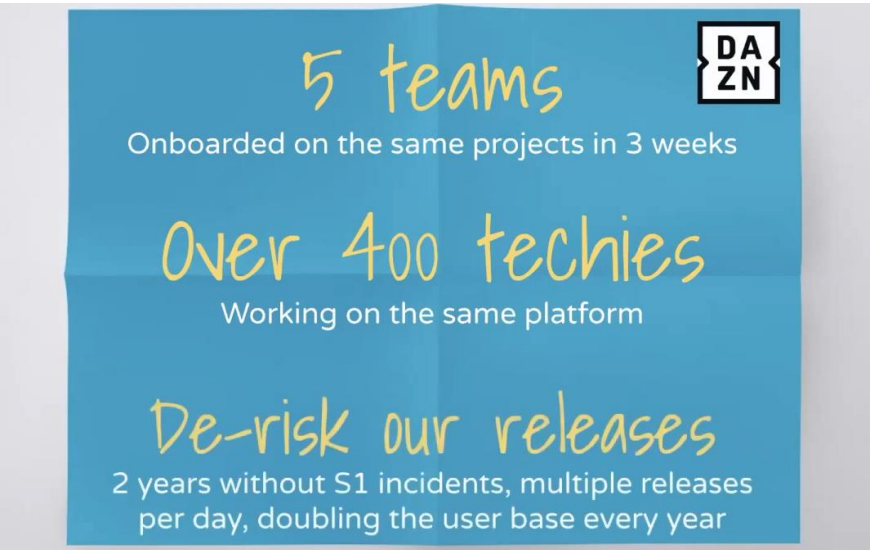
To remove MFEs on the page, the bootstrap will unload (removing the listeners, etc) the MFE as needed.



We publish certain complex things like the video player as NPM packages in our private NPM repository. Components are loaded at compile time, but can also be loaded at run time.



We use serverless Lambda-at-the-edge with CloudFront as CDN to serve data from the closest location to the user.


5 teams
DA ZN
Onboarded on the same projects in 3 weeks
Over 400 techies
Working on the same platform
De-risk our releases
2 years without S1 incidents, multiple releases per day, doubling the user base every year