Learning Video series

Amazon Prime Video - Living Room
Rebuilding Architecture to scale quickly

- S/w point of view
    - Huge Range of devices
        - From Fire stick (500MHz single core MIPS CPU and 100mb RAM)
        - Smart TV (1GHz quad core ARM, 300mb RAM)
    - Browser
        - No standards for remote controls, secure key storage
        - 60 variants of HTML
    - Ignition stack (implemented by the team)
        - TV manufactures dont have app store (for updating versions of the stack)
        - Can't add features to Native code
    - Ignite (low end, less powerful devices)
        - Roku streaming stick
            - Cheap, abundant
        - No GPU needed, only 1 CPU suffices
        - Lua programming language (small, fast; traditionally used in video games coz of small footprint)
            - Few people know how to program
            - No libraries
        - JS issues
            - No jitter
            - Ducttape JS engine(fast enough, little enough memory to fit on devices)
                - Adds 2mb to exe
                - Downside - garbage collection is bad doesn't bode well with animations
            - JS Core adds 20MB to exe
    - Blast Service → Single App Interpreter → HTML/Ignition/X SDK implementation → HTML5 / Ignition / X Device + Bespoke/Ruby Player
    - React JS is much larger than Blast JS
    - Blast Js is just a renderer
    - React JS though larger but smarter
        - download pages on the fly based on the hops