

# The Modern Software Developer

CS146S  
Stanford University, Fall 2025  
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# Automated UI and App Building

**This is not the “vibe coding” class**

...except today

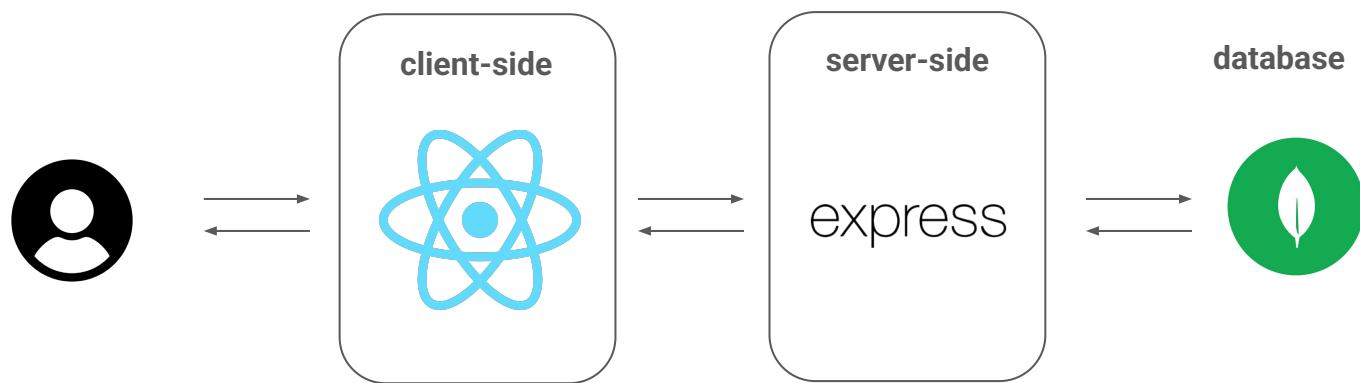
# Why

- Modern SaaS development has focused on web apps for over two decades

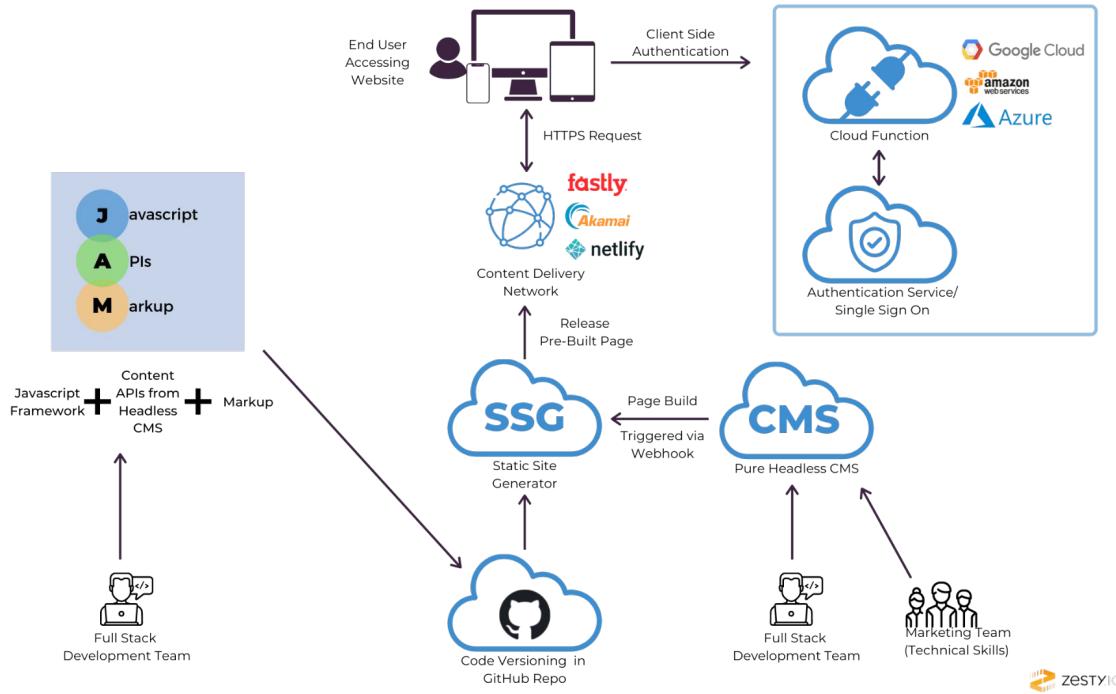
# The Old Days

- LAMP
- MERN
- JAM
- Serverless

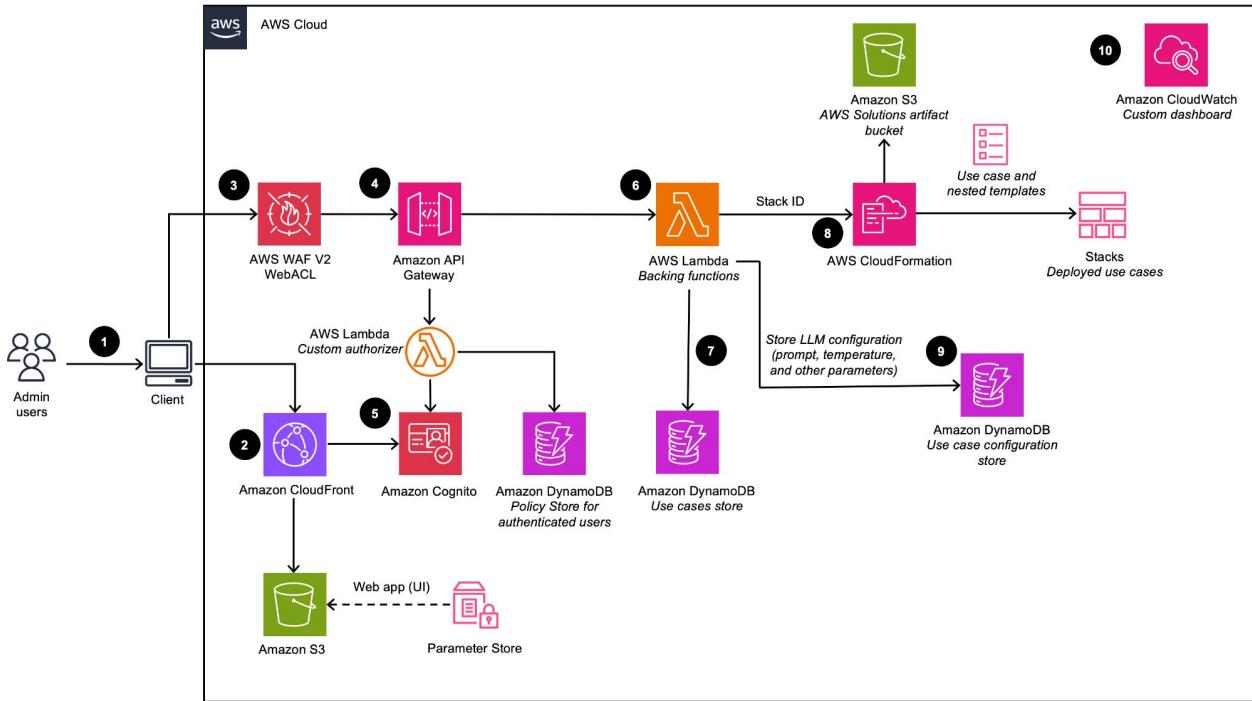
# The Old Days



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# Take #1: Visual Low-code/No-code

- Wix
- Squarespace
- Webflow

# The New AI World

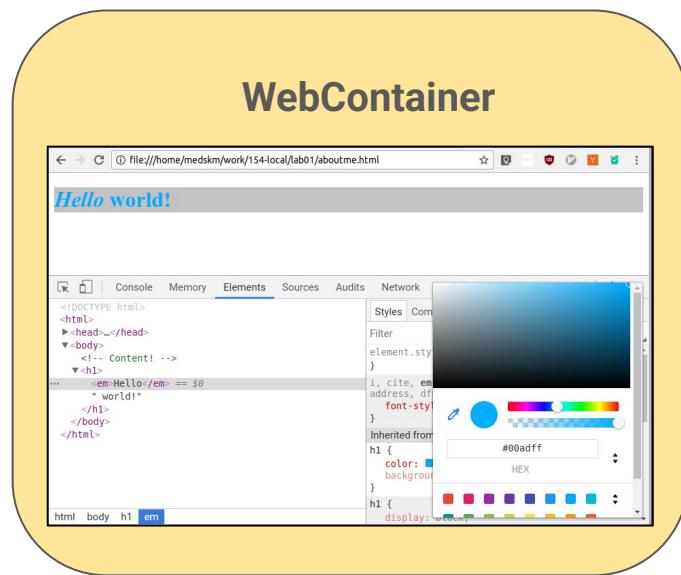
- Lovable
- Replit
- Vercel v0
- Base44
- Cursor/Claude Code/etc

# What Has Changed

- Prompt your way to a fully fledged app
- Engineers are becoming more cross-functional
  - Design
  - Product management
- Anyone can build an app now
  - More user-friendly than 1st generation no-code platforms like Webflow, Wix, Squarespace

# Let's Make An App Right Now

# App Builder Architecture



# App Builder System Prompt

# Limitations

- Everything is awesome when it works but once things break we're back at square 1
- Prompts are just suggestions. Not every user understands that
- Security has been an issue in the past
- How do we prevent all these apps from looking the same?
- How complex can these apps realistically get?

# Questions?