
AWS
re:Invent
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FWM313

Build and deploy SSR web applications with Next.js and AWS Amplify

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Agenda

AWS Amplify Hosting features

Next.js overview

Frontend delivery patterns

Demo

Whiteboard session

Q&A

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AWS Amplify

A complete solution that helps frontend developers quickly build web and native mobile apps

Amplify Studio	Amplify CLI	Amplify libraries	**Amplify Hosting**
Visual interface for creating backends and cloud-connected frontend UIs	Configure and maintain your app's backend services, e.g., auth, storage, and APIs	Libraries to quickly access backend services UI Components – open-source design system with cloud-connected components to easily display information in both web and mobile frontend apps	CI/CD to test and release your app; hosting quickly and reliably delivers your app and its assets to your customers

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Amplify Hosting features

Git repository integration

CI/CD

Preview branches

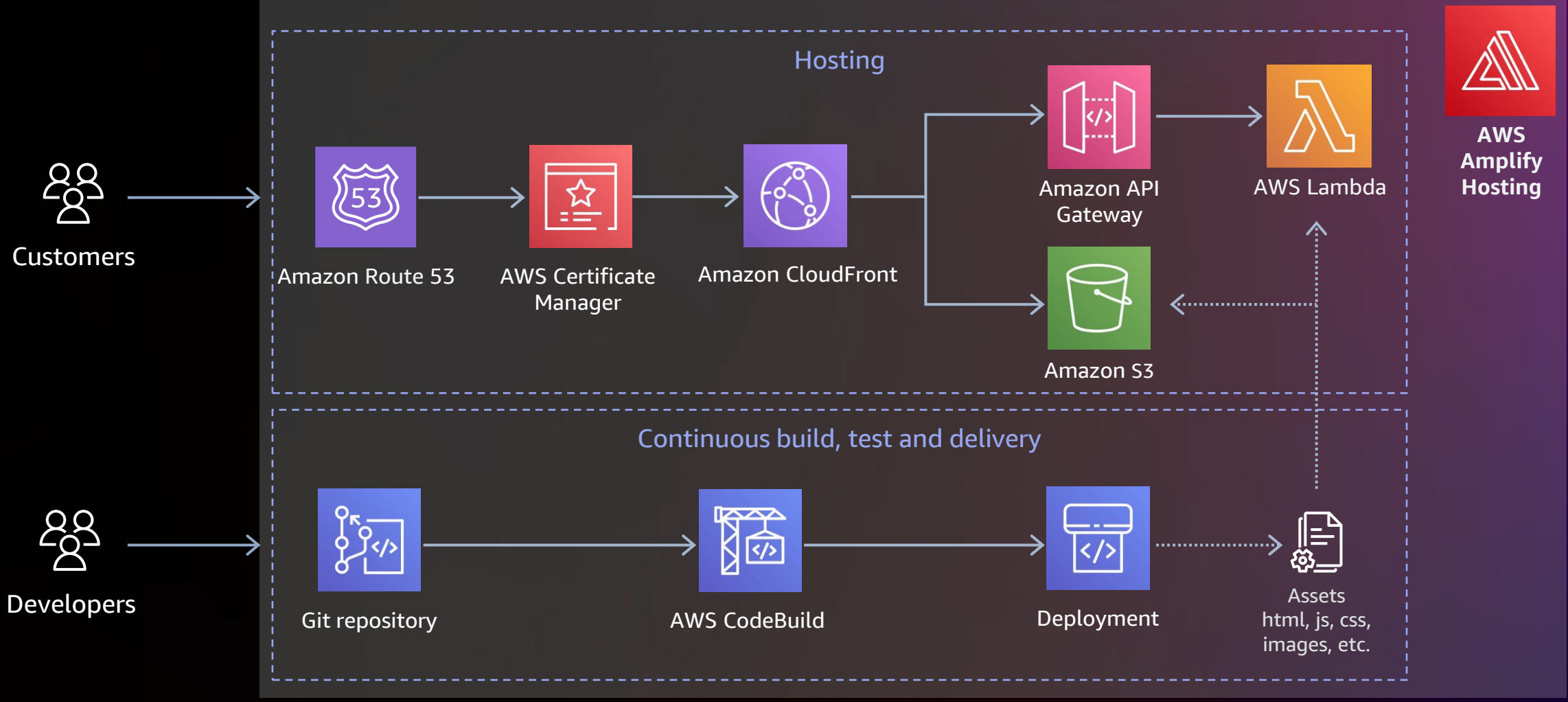
CDN

SSL and domain name

Integration with other AWS Amplify services

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Amplify Hosting features



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Amplify Hosting benefits

Performance

Scale

Reliability

Low operational overhead

Cost

Security

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Next.js

React framework

Hybrid static and server rendering, TypeScript support, good developer experience

Over 90,000 stars on GitHub

More opinionated than React

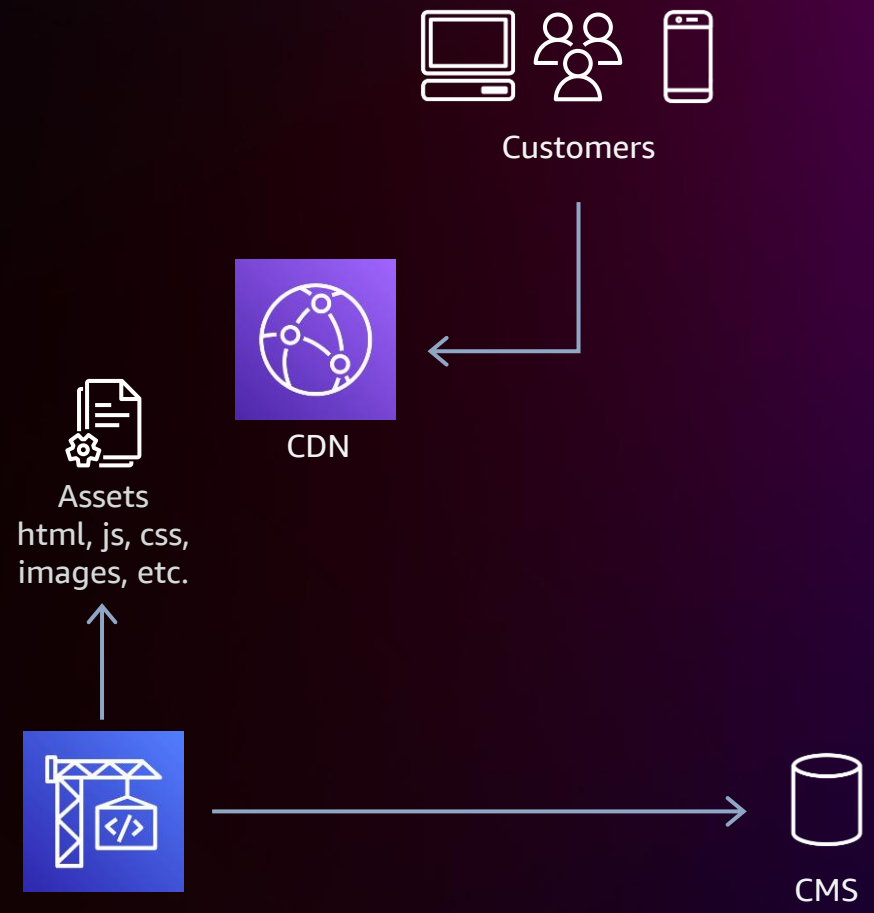
Developer familiarity

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Frontend delivery – Static site generation

Static site generation (SSG)

- HTML is rendered **during a build process**
- Typically used with a headless content management system (CMS) and content delivery network (CDN)
- Popular generators Gatsby, Eleventy, Hugo, VuePress, and Jekyll

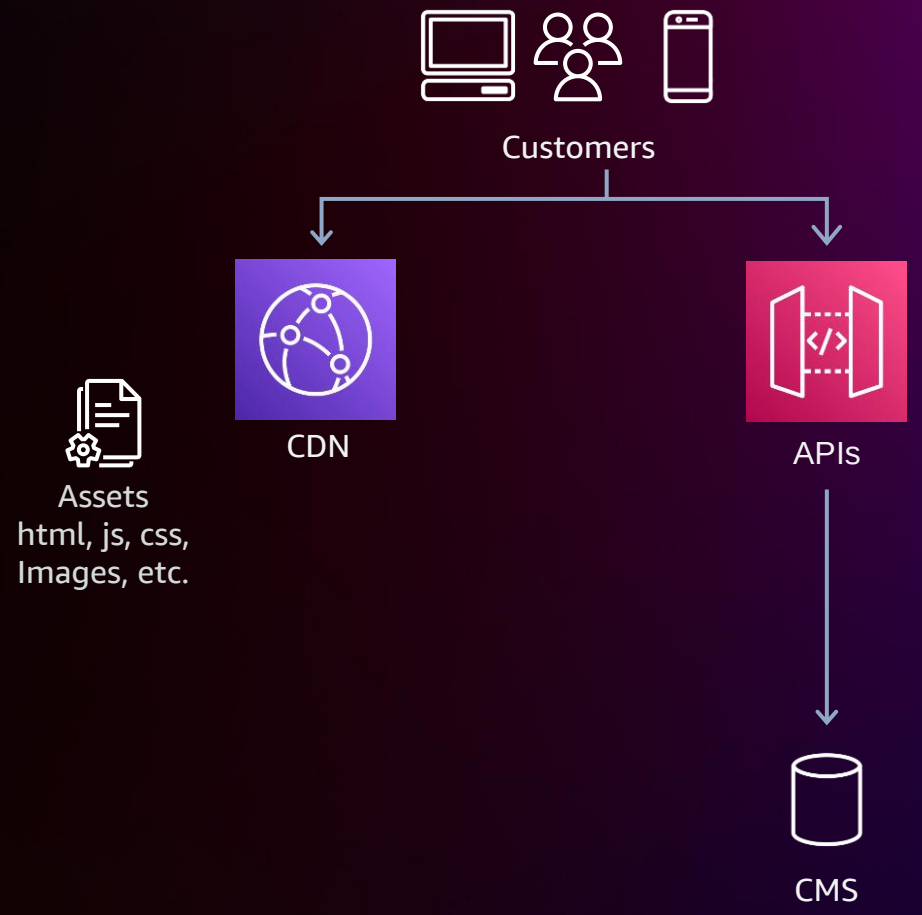


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Frontend delivery – Client-side rendering

Client-side rendering (CSR)

- Single page applications (SPAs)
- Frontend application loaded as JavaScript then HTML is rendered by the customer's browser
- JavaScript files contain app logic and UI and manage communication with backend APIs
- Popular frameworks include React, Angular, Vue and Svelte

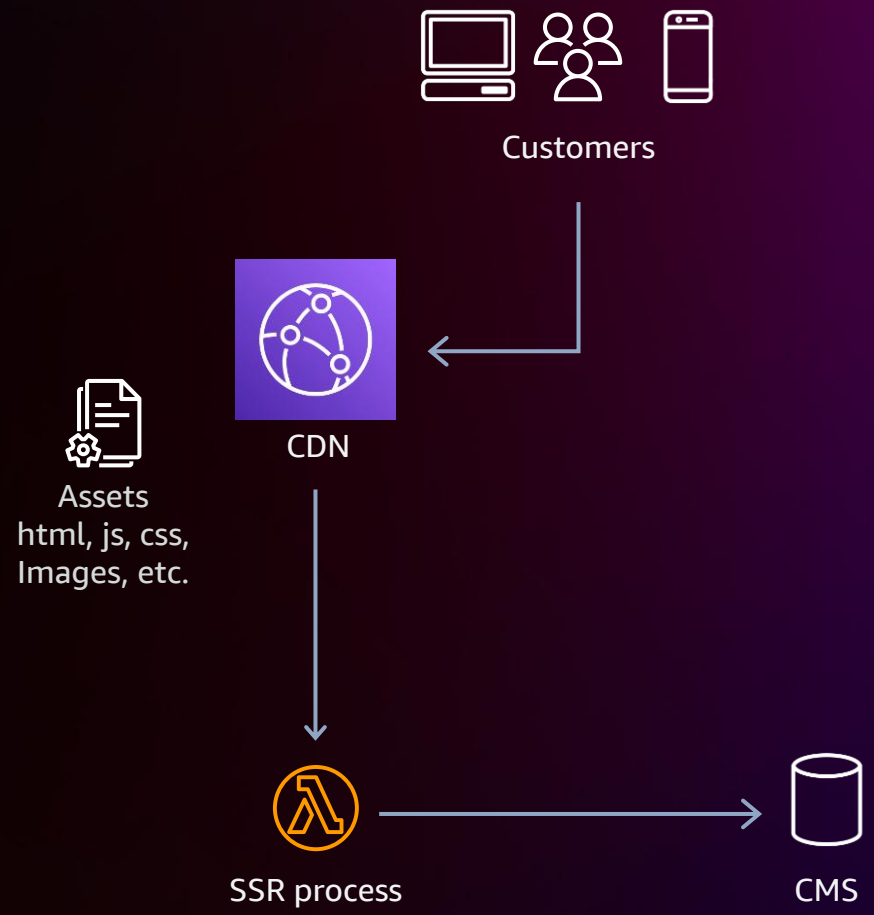


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Frontend delivery – Server-side rendering

Server-side rendering (SSR)

- HTML is rendered **on request**
- Faster time-to-content for customers than CSR
- More dynamic than SSG
- Popular frameworks include Next.js, Nuxt, SvelteKit, and Remix



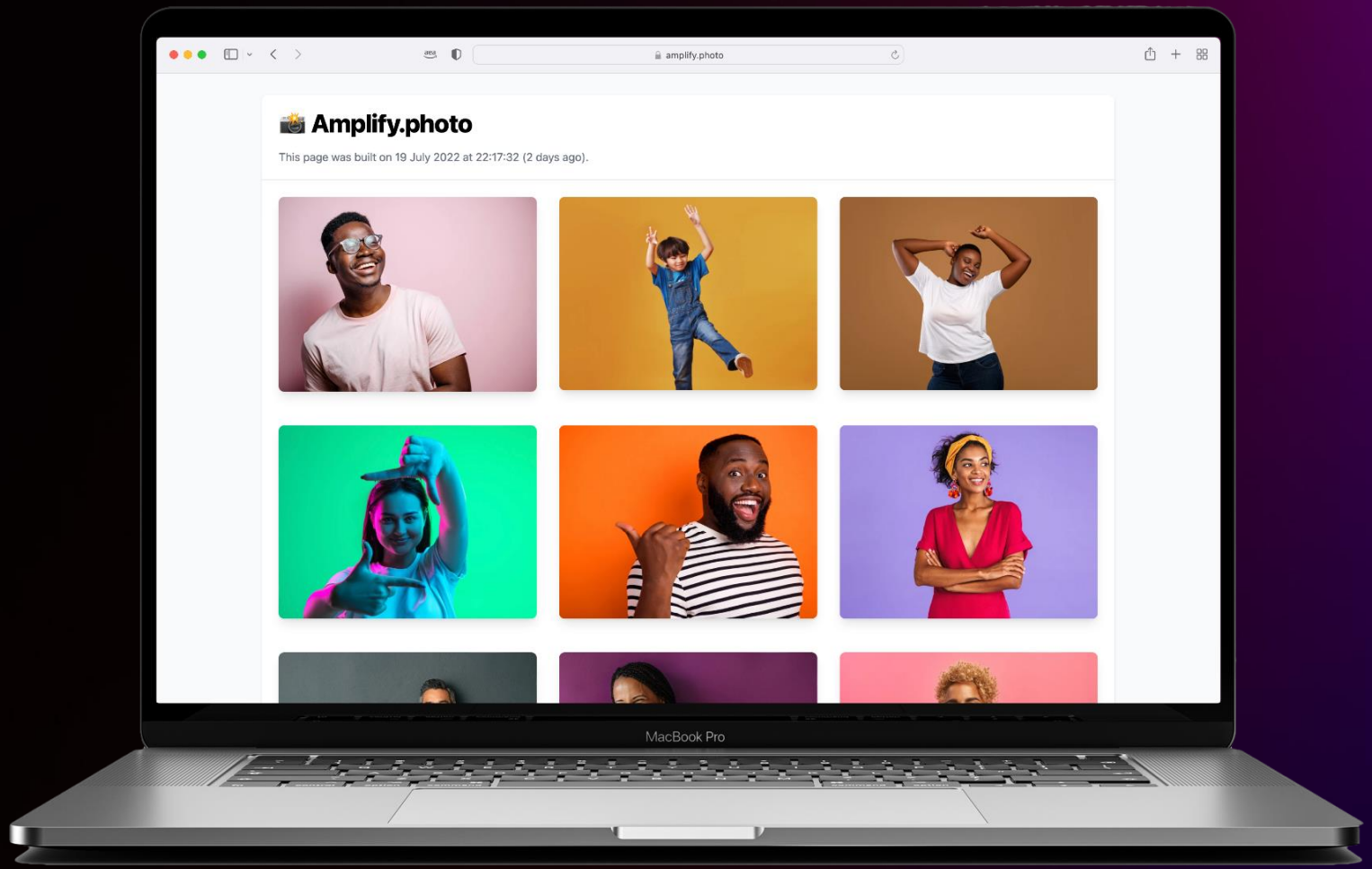
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Questions

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Example app using SSR





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Discussion

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Additional resources

amplify.photo
Our demo app

AWS Amplify Discord
A community of developers who are using AWS Amplify to build great apps

FWM307 Build a cross-platform mobile app in Flutter with AWS Amplify
In this workshop, you will create a cross-platform Flutter mobile app using AWS Amplify. The app is a trip planner where users can create a trip and set its name, destination, and dates.

AWS speakers, more resources are on the wiki

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