
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

DOP206-R

Introducing Amazon CodeCatalyst

Harry Mower (he/him)

Director, DevOps Services
AWS

Doug Clauson (he/him)

Product Manager, DevOps Services
AWS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



Harry Mower

Director, DevOps Services
Amazon Web Services

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



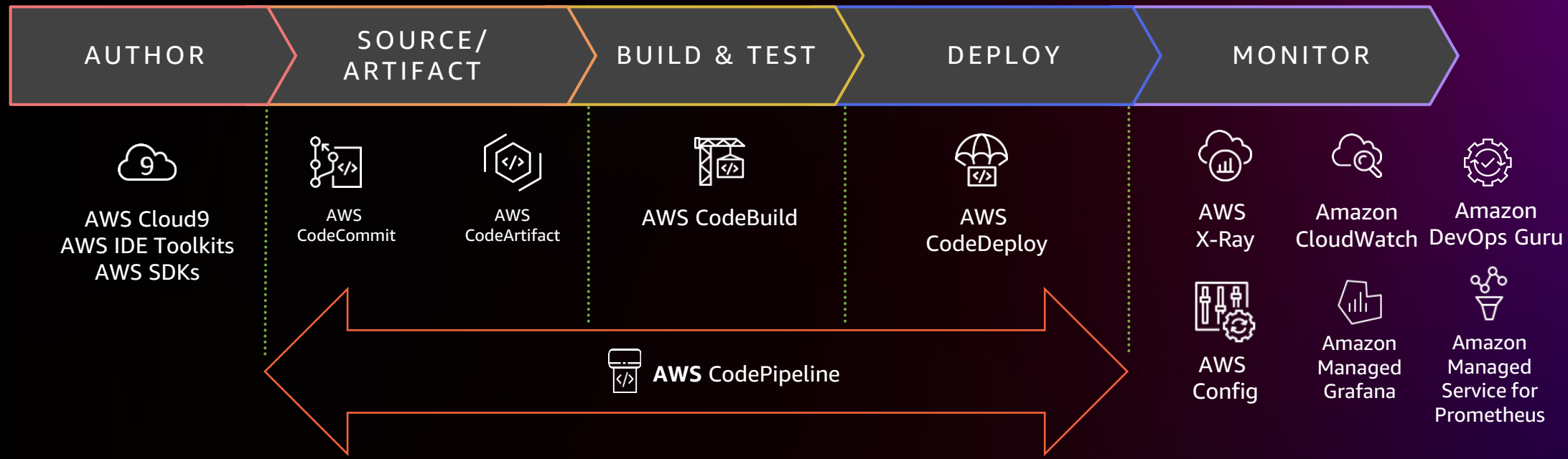
Doug Clauson

Product Manager, DevOps Services
Amazon Web Services

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.



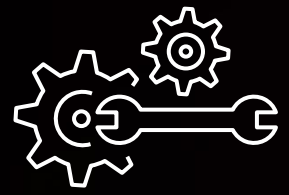
AWS dev tools – A full set of tools



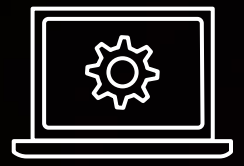
MODEL **AWS** CloudFormation | Cloud Development Kit (AWS CDK, CDK8s, CDK-terraform) | AWS Serverless Application Model (SAM)

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

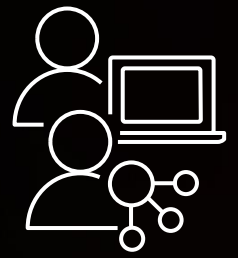
Challenges in building cloud applications



Setting up projects and integrating tools



Automating CI/CD and environments

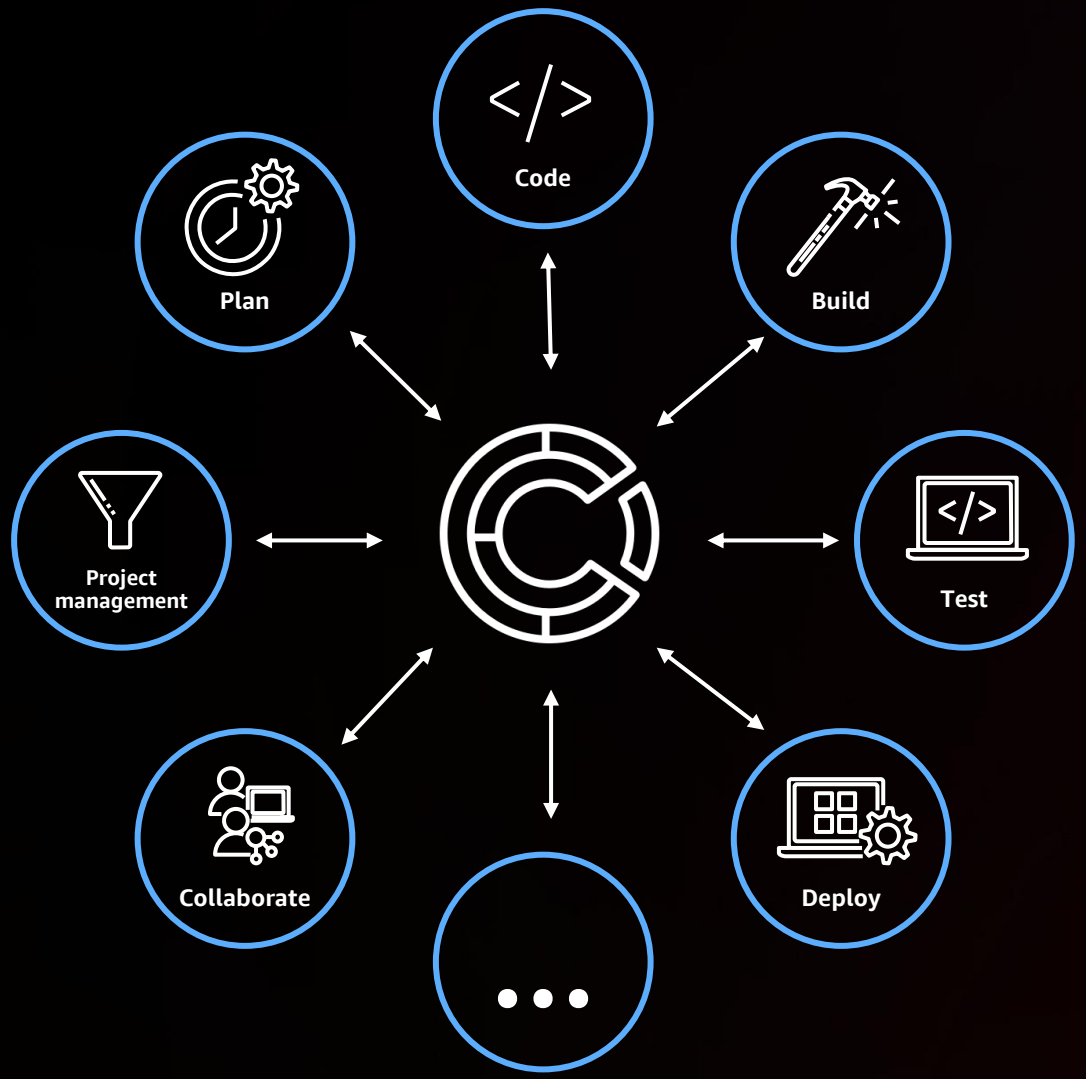


Complexity of modern applications

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Amazon CodeCatalyst



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Amazon CodeCatalyst Pricing FAQ Workspaces Sign up

Amazon CodeCatalyst

Spark a faster planning, development, and delivery lifecycle on AWS

Sign up for free

CREATE AN AMAZON CODECATALYST SPACE FOR FREE AND GET:

- 2000 build minutes
- 60 Dev Environment hours
- 10 GB source storage
- 64 GB Dev Environment storage

Learn more →

Create projects with everything you need in minutes

CodeCatalyst's project blueprints automatically setup everything you need to start a new project including CI/CD, AWS services, issue tracking, and deployable code with AWS best-practices by default. Swap in GitHub and Jira to continue using your existing tools.

Blueprints

Repository name: aws

Web Application Framework: Angular, React, Vue

Hosting: Amplify Hosting, CloudFront + S3

CDK Programming Language: Python, Typescript

Environment AWS Region: us-west-2

Stack name: DevelopmentFrontend

Create project

Your Dev Environments — Create Dev Environment

Resources	IDE	Status	Last modified
cdux-repo main	Cloud9	Running	Just now

Spend more time coding and less time managing development environments

CodeCatalyst Dev Environments are available on-demand in the

Accelerate project setup

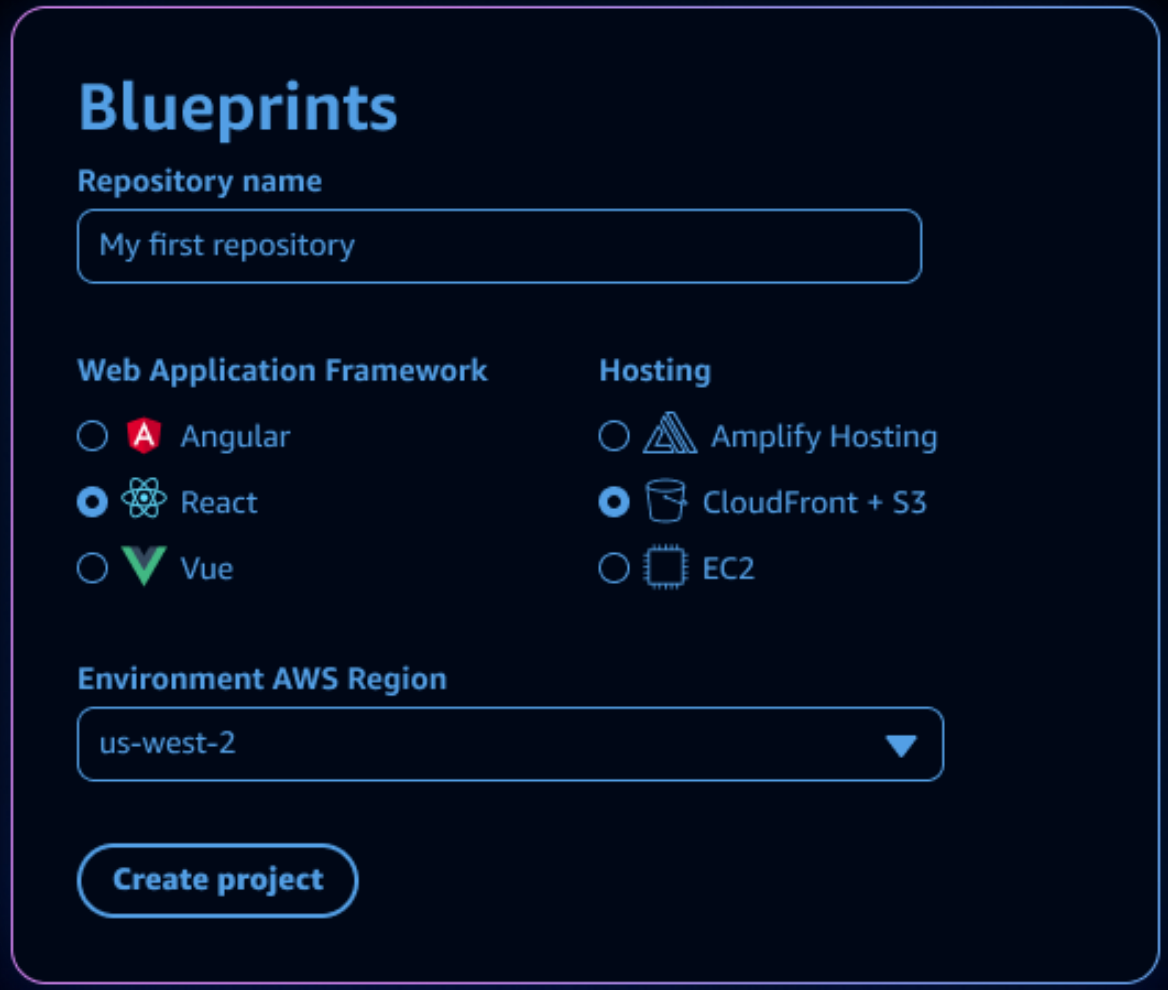


Set up integrated project tools in minutes

Select from a library of well-architected application patterns

Continue using GitHub or Jira

Continue working with existing projects



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

codecatalyst.aws | Amazon CodeCatalyst Console | Amazon CodeCatalyst Console | Amazon CodeCatalyst Console | Amazon CodeCatalyst Console

codecatalyst.aws/spaces/FirstSpace/projects

Amazon CodeCatalyst | FirstSpace | Projects | Search code, issues, projects, and users

FirstSpace

Create Space | Create Project

Projects | Activity | Members | Installed extensions | AWS accounts | Space settings | Billing

Projects (12)

Your projects | View settings

Find projects

1

Example3
Last modified: November 25, 2022 at 10:52 AM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

JavaAPI
Last modified: November 23, 2022 at 07:21 PM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

SPA-To_Patch
Last modified: November 22, 2022 at 09:14 PM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

Simple-Lambda
Last modified: November 20, 2022 at 11:40 AM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

React-Example2
Last modified: November 25, 2022 at 10:44 AM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

ClickStream
Last modified:

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments
Issues

NET-SAM
Last modified: November 23, 2022 at 07:45 PM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments

React-Example
Last modified:

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments

ETLProject
Last modified: November 25, 2022 at 08:58 AM

Pull requests | Source repositories
Workflows | Dev Environments
Reports | Environments

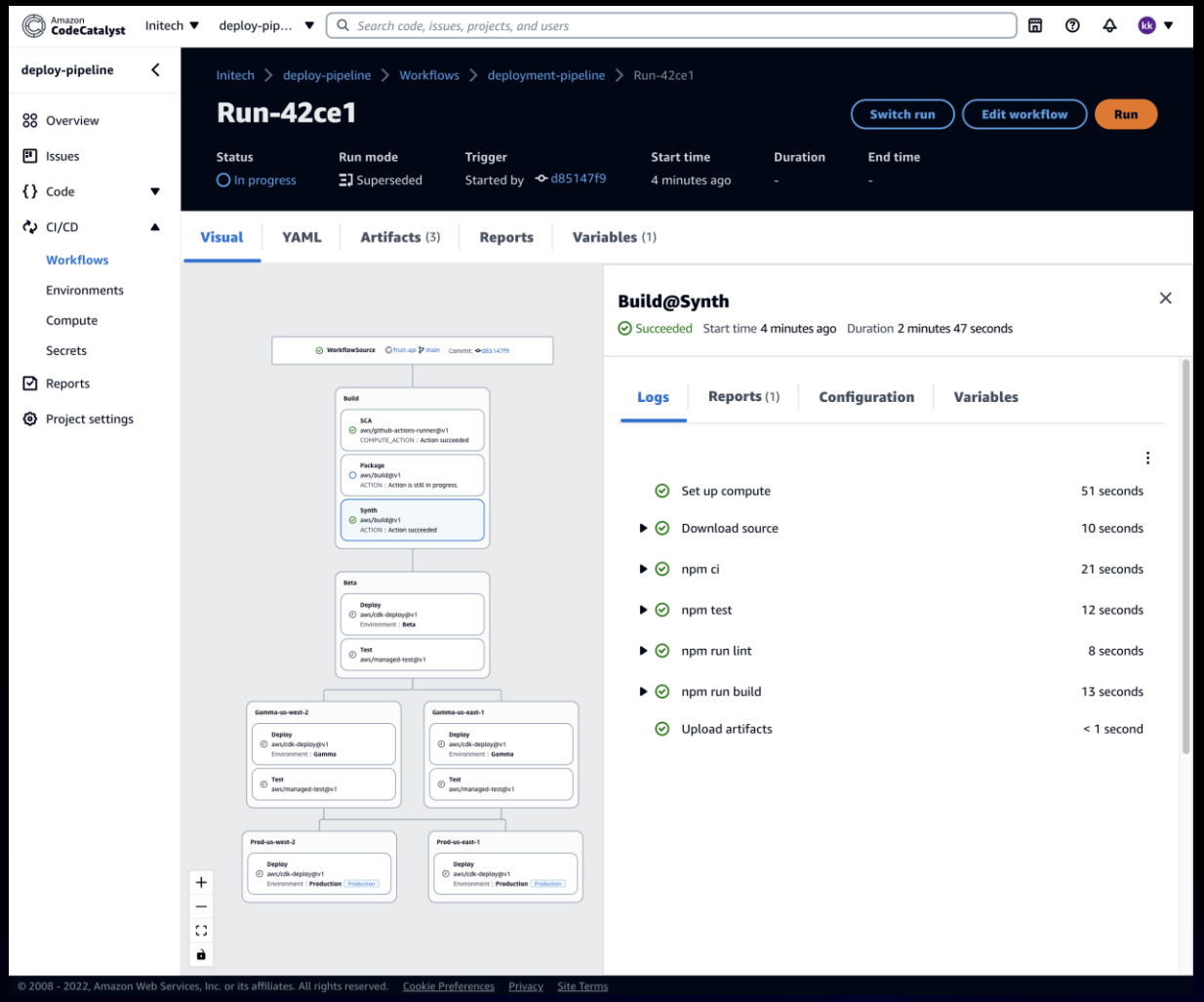
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. Cookie Preferences | Privacy | Site Terms

Search | 12:10 PM 11/26/2022

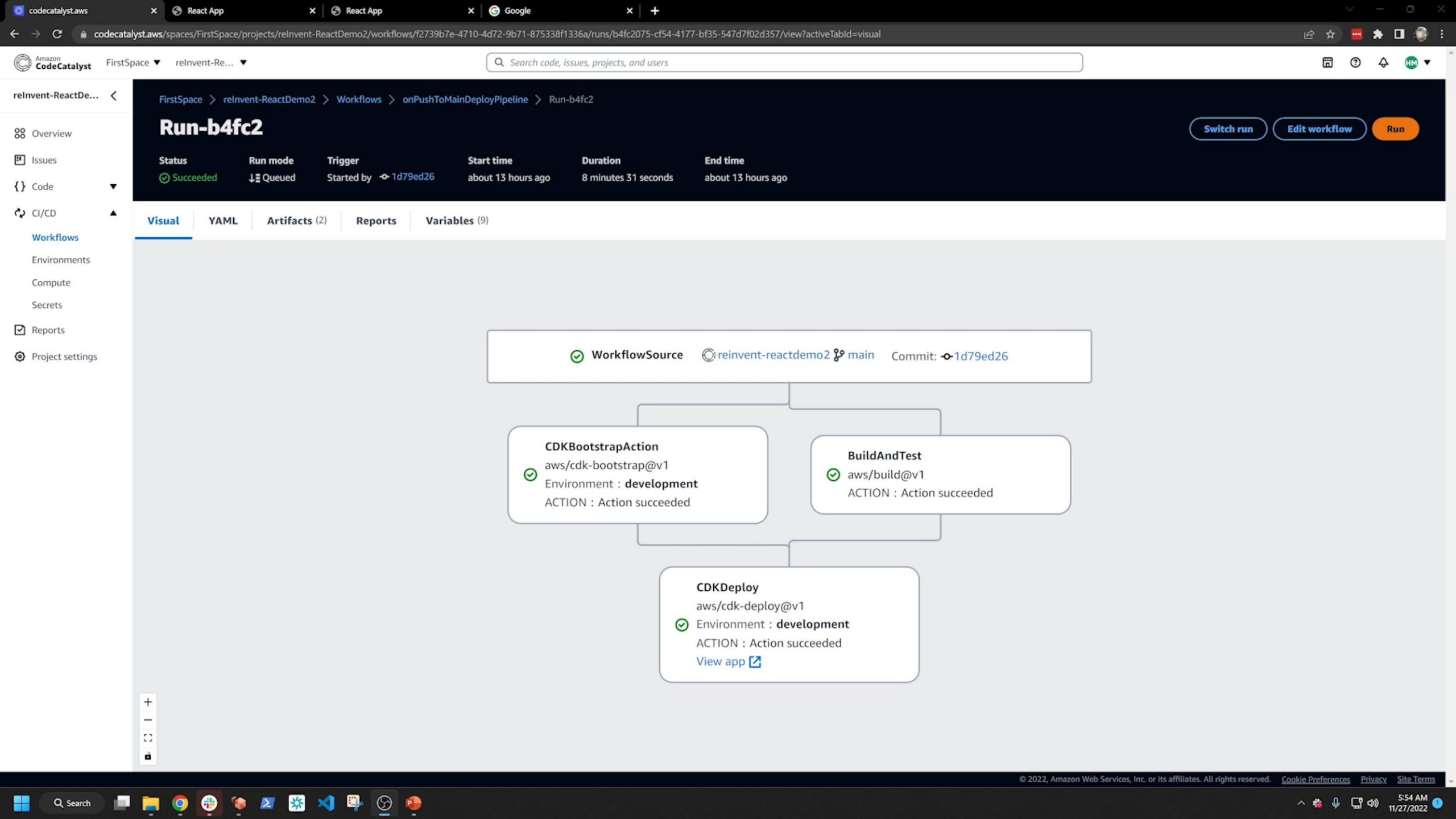
Automate daily workflows



- Compose with visual editor or YAML
- Build with flexible, managed compute
- Use with GitHub Actions
- Streamline testing and reporting
- Automate deployments
- …



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.


codecatalyst.aws
React App
React App
Google
codecatalyst.aws/spaces/FirstSpace/projects/reInvent-ReactDemo2/workflows/f2739b7e-4710-4d72-9b71-875338f1336a/runs/b4fc2075-cf54-4177-bf35-547d7f02d357/view?activeTabId=visual
Amazon CodeCatalyst
FirstSpace
reInvent-Re...
Search code, issues, projects, and users
reInvent-ReactDe...
Overview
Issues
Code
CI/CD
Workflows
Environments
Compute
Secrets
Reports
Project settings
FirstSpace > reInvent-ReactDemo2 > Workflows > onPushToMainDeployPipeline > Run-b4fc2
Run-b4fc2
Switch run
Edit workflow
Run
Status
Succeeded
Run mode
Queued
Trigger
Started by 1d79ed26
Start time
about 13 hours ago
Duration
8 minutes 31 seconds
End time
about 13 hours ago
Visual
YAML
Artifacts (2)
Reports
Variables (9)
WorkflowSource
reinvent-reactdemo2
main
Commit: 1d79ed26
CDKBootstrapAction
aws/cdk-bootstrap@v1
Environment : development
ACTION : Action succeeded
BuildAndTest
aws/build@v1
ACTION : Action succeeded
CDKDeploy
aws/cdk-deploy@v1
Environment : development
ACTION : Action succeeded
View app
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Cookie Preferences
Privacy
Site Terms
Search
5:54 AM
11/27/2022

Automate environments: Dev environments

Create Dev Environment and open with IntelliJ IDEA

Repository

- (•) Clone a repository
  Clone a branch from an existing repository to the Dev Environment.
- ( ) Create an empty Dev Environment
  Create an empty Dev Environment and clone a repository later.

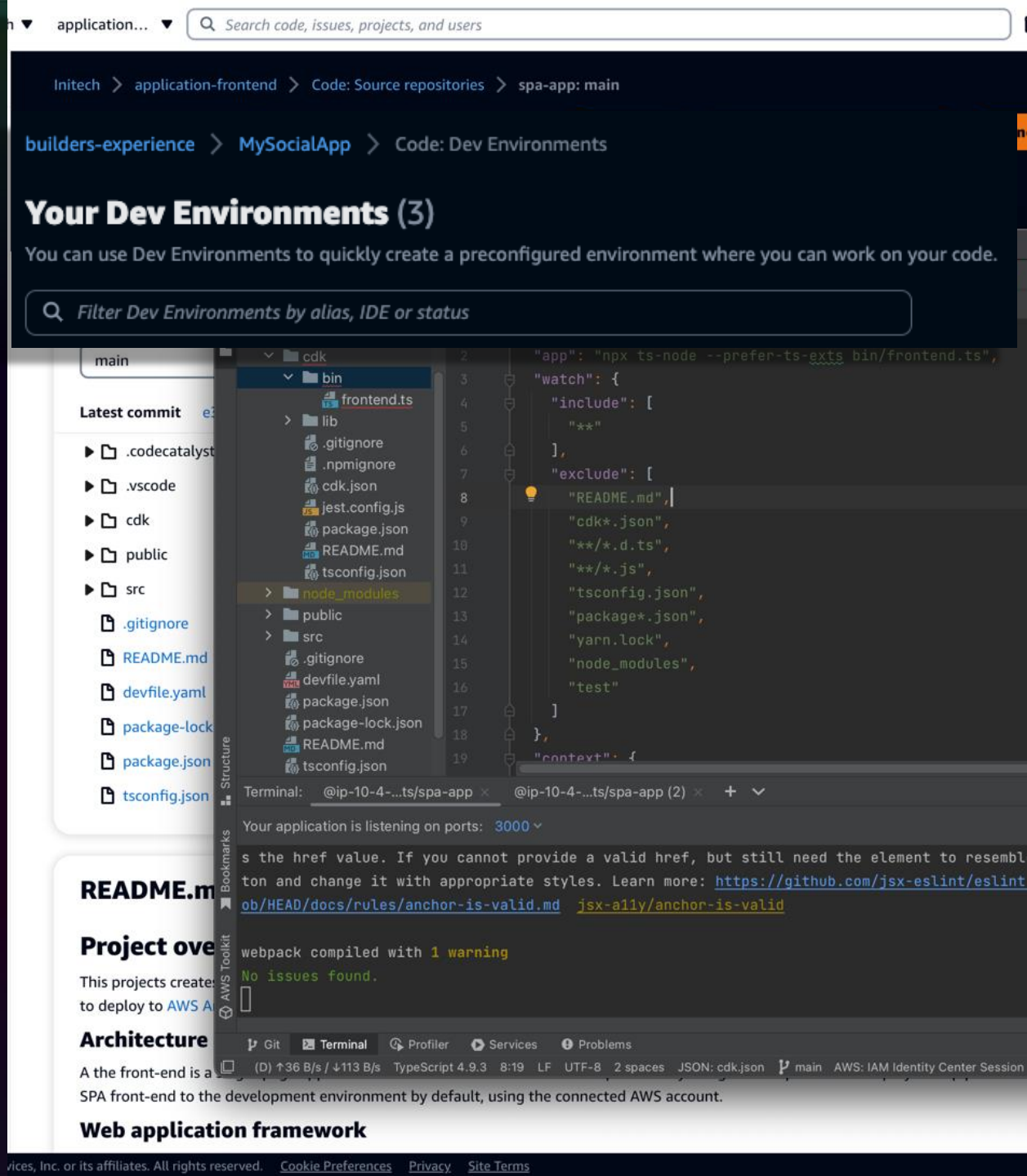
Branch

- (•) Work in existing branch
  Clone an existing branch into your Dev Environment
- ( ) Work in new branch
  Creates a branch from an existing branch

Branch name

select branch

Create



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

reInvent-ReactDe...
Overview
Issues
Code
CI/CD
Reports
Project settings

reInvent-ReactDemo2 summary

Members +
View all

Repositories

View repository

reinvent-reactdemo2

main / README.md

Project overview

This blueprint creates a React SPA (single-page application) project. The project uses the Typescript AWS Cloud Development Kit (CDK) to deploy to Amazon Cloudfront + Amazon S3.

Architecture overview

A (SPA) single-page application is a web application implementation that loads a web document and updates it by using JavaScript APIs. Your customers can then use your website without loading entire pages from the server, which helps improve your website's performance and provides a more dynamic user experience.

The deployment pipeline deploys the SPA to an Amazon CodeCatalyst environment. The Amazon CodeCatalyst environment requires an AWS account connection for your Amazon CodeCatalyst space and a configured IAM role for your project workflow. After you create your project, you can view the repository, source code, and CI/CD workflow for your Amazon CodeCatalyst project. After your workflow runs successfully, you can access your deployed CDK application URL in the output of your workflow.

Web application framework

React - powered by Create React App

Hosting

Workflow runs

Create workflow

Run-3fcf7 started by 138052f2 in reinvent-reactdemo2 main onPushToMainDeployPipeline 2 minutes ago

No workflow run in reinvent-reactdemo2 main onPullRequestBuildAndTest

View all

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. Cookie Preferences Privacy Site Terms

Fluid collaboration

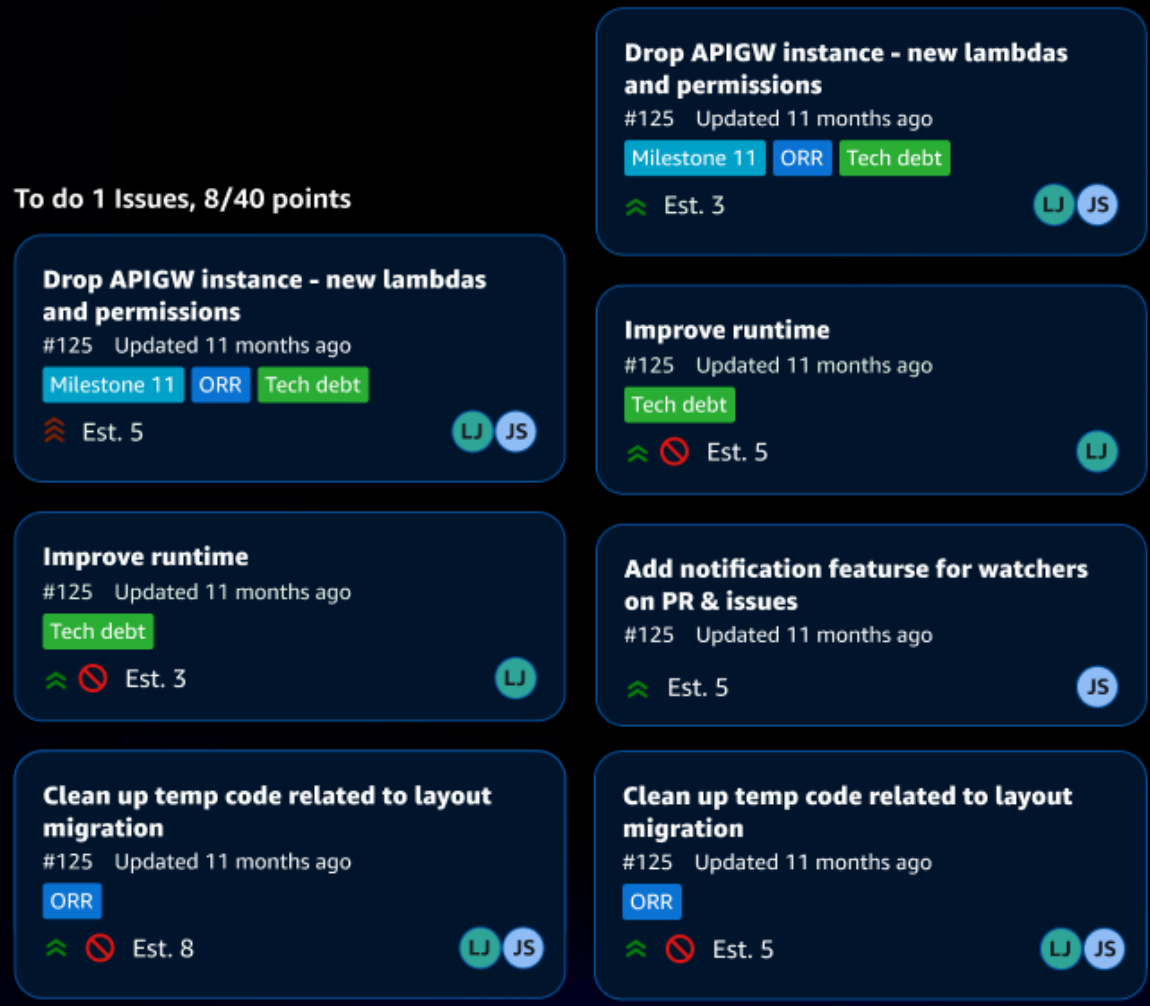


Invite teammates with email

Track issues

Set up automated notifications

Follow project activity



aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

reInvent-ReactDe...
Overview
Issues
Code
CI/CD
Reports
Project settings

reInvent-ReactDemo2 summary

Members +
HM DC View all

Repositories

View repository

reinvent-reactdemo2

main / README.md

Project overview

This blueprint creates a React SPA (single-page application) project. The project uses the Typescript AWS Cloud Development Kit (CDK) to deploy to Amazon Cloudfront + Amazon S3.

Architecture overview

A (SPA) single-page application is a web application implementation that loads a web document and updates it by using JavaScript APIs. Your customers can then use your website without loading entire pages from the server, which helps improve your website's performance and provides a more dynamic user experience.

The deployment pipeline deploys the SPA to an Amazon CodeCatalyst environment. The Amazon CodeCatalyst environment requires an AWS account connection for your Amazon CodeCatalyst space and a configured IAM role for your project workflow. After you create your project, you can view the repository, source code, and CI/CD workflow for your Amazon CodeCatalyst project. After your workflow runs successfully, you can access your deployed CDK application URL in the output of your workflow.

Web application framework

React - powered by Create React App

Hosting

Workflow runs

Create workflow

Run-e84c5 started by 590e688b in reinvent-reactdemo2 main onPushToMainDeployPipeline 1 hour ago

No workflow run in reinvent-reactdemo2 main onPullRequestBuildAndTest

View all

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved. Cookie Preferences Privacy Site Terms

Take the next step



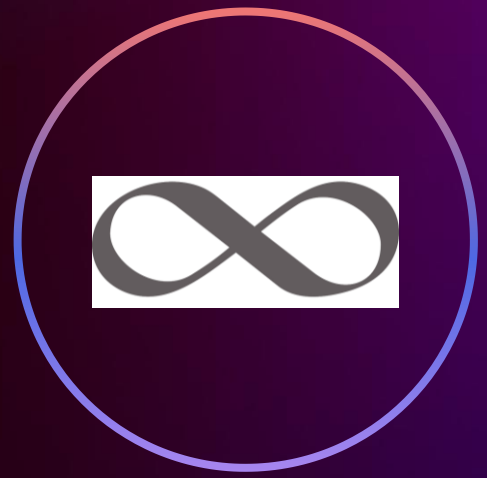
Create an account on Amazon CodeCatalyst



Select a blueprint



Create a dev environment



Accelerate delivery

https://codecatalyst.aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Thank you!

Harry Mower
linkedin.com/in/harrymower/

Doug Clauson
linkedin.com/in/doug-clauson/



Please complete the session survey in the **mobile app**

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.