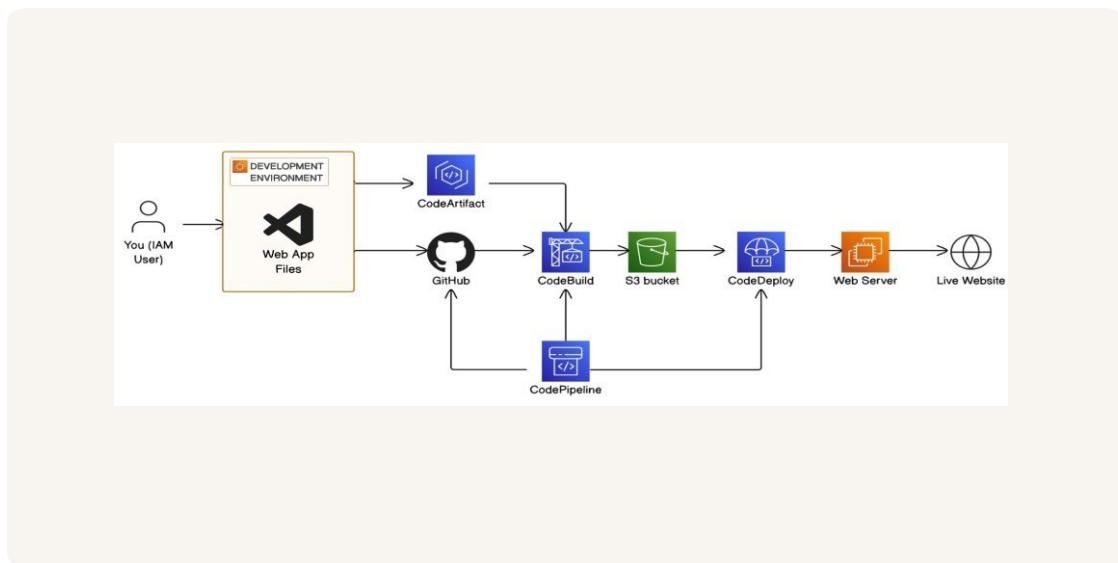


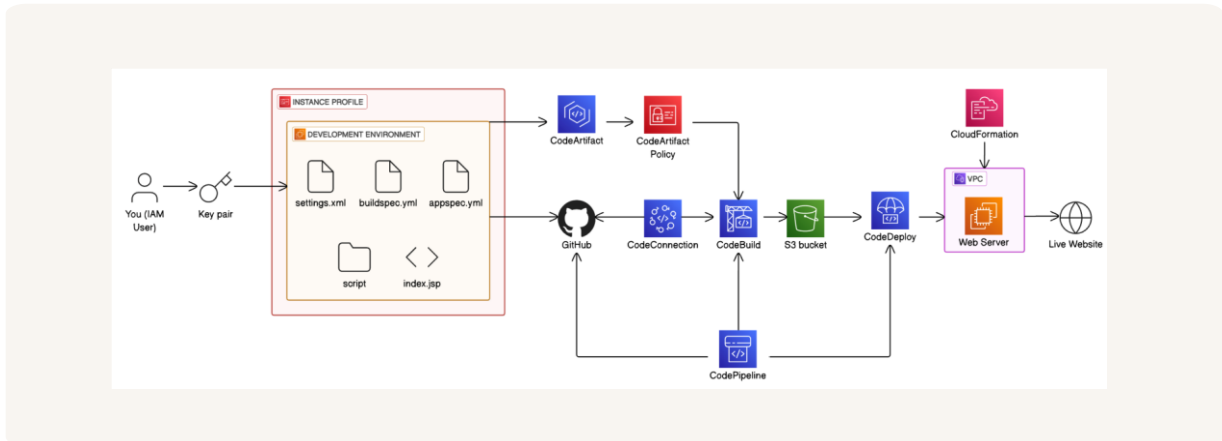


# I'm starting the 7Day DevOps challenge!



## I'm building a CI/CD pipeline in 7 days

In this DevOps challenge, I'm learning about the core principles and practical implementation of Continuous Integration and Continuous Deployment (CI/CD) using AWS services. By the end of the 7 days, I will have built a complete CI/CD pipeline from scratch that automates the building, testing, and deployment of a web application. I'll gain hands-on experience with tools like AWS CodePipeline, CodeBuild, CodeDeploy, and CloudFormation, and I will have documented each step of the process to showcase my DevOps skills in a professional portfolio. This challenge will strengthen my understanding of cloud-based DevOps workflows and improve my ability to deliver reliable, automated, and scalable applications in realworld environments.



## Hold me accountable!

I will set aside one hour every day for a week to work on this challenge. I will keep myself accountable by tracking my progress daily and sharing updates with my peers or on LinkedIn to stay motivated. My reward for completing this DevOps challenge will be a stronger portfolio, improved hands-on skills in CI/CD and AWS, and a well-deserved treat—like a nice dinner or a relaxing movie night.

### What is DevOps?

DevOps is a set of cultural philosophies, practices, and tools that combine software development (Dev) and IT operations (Ops) to shorten the software development lifecycle and deliver high-quality applications continuously. It emphasizes collaboration between traditionally siloed teams, automation of processes, and continuous monitoring to improve deployment speed and software reliability. DevOps engineers implement these practices by building automated CI/CD pipelines, managing infrastructure as code (IaC), and integrating tools like AWS CodePipeline, Jenkins, or GitHub Actions to streamline workflows. They also ensure system reliability through monitoring and logging, enhance scalability through containerization (e.g., Docker, Kubernetes), and enable repeatable deployments using



**Darpan Patel**

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cloudnative tools like AWS CloudFormation or Terraform. Their goal is to accelerate development without compromising security, stability, or performance.

## **What is CI/CD?**

CI/CD stands for Continuous Integration and Continuous Delivery (or Continuous Deployment).

This process helps teams by automating the steps involved in integrating code changes, testing them, and deploying them to production environments—ensuring faster and more reliable software delivery. In Continuous Integration (CI), developers frequently merge code changes into a shared repository, where automated builds and tests run to catch issues early. In Continuous Delivery (CD), validated code is automatically prepared for release to staging or production environments, while Continuous Deployment goes a step further by automatically deploying every successful change to users without manual intervention. Together, CI/CD helps teams detect bugs early, reduce integration issues, and release updates more rapidly and confidently.



Darpan Patel

## Excited to share my progress

