
Fullstack javascript nanodegree

Session 8

Agenda

- EB CLI & AWS CLI
- Live Deployment Demo
- CI/CD
- Intro To CircleCI configurations
- Q&A





EB CLI & AWS CLI

EB CLI

It's a utility that can help us with managing the elastic beanstalk applications.

Here's the commands you're going to need the most:

- `eb init --platform node.js --region us-east-1`
- `eb create --sample udagram-api-dev`
- `eb use udagram-api-dev`
- `eb setenv PORT=8080`
- `eb deploy udagram-api-dev`



AWS CLI

It's a utility that manage everything and anything you can think of in aws.

EB cli, is actually using and running aws commands internally.

Here's the commands you're going to need the most:

- `aws configure`
- `aws configure list`
- `aws s3api create-bucket \`
`--bucket fwd-udagram \`
`--region us-east-1 \`
`--profile fwd`





Live Deployment Demo

Starter Project

<https://github.com/udacity/nd0067-c4-deployment-process-project-starter>

It has both parts frontend & backend





CI/CD

CI/CD

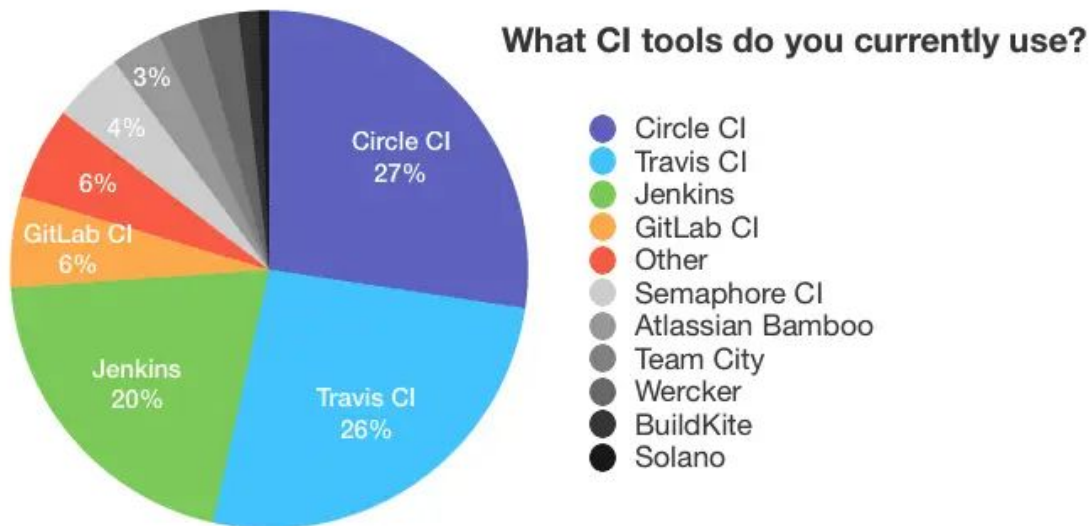
Benefits:

- Smaller Code Changes
- More Test Reliability
- Faster Release Rate
- Smaller Backlog
- Increase Team Transparency and Accountability
- Reduce Costs
- Easy Maintenance and Updates



CI/CD

The Most Popular CI/CD tools out there



Pipelines

A CI/CD pipeline is a series of steps that must be performed in order to deliver a new version of software.

A CI/CD pipeline introduces monitoring and automation to improve the process of application development, particularly at the integration and testing phases, as well as during delivery and deployment.

We can make different steps to check in the pipeline stage:

Build, Test, Linting, Release and Deploy





Intro to CircleCI Configurations

CircleCI

- **Orbs:**

Reusable packages of config that help developers speed up their CI/CD pipeline and integrate with new tools with just a single line of code.

- **Jobs:**

A series of steps that runs in an execution environment

- **Workflows:**

A set of rules for defining a collection of jobs and their run order.



CircleCI

- The Configuration file is written in YML format.
- It's saved with the name of `config.yml`, inside a `.circleci` folder.
- It has all the configuration of our pipeline, the steps we do, the commands we run and the order of each one of it.
- It's automatically detected by CircleCI incase of following the naming convention.





Q&A

Your Feedback is Appreciated



References

- [AWS CLI & EB CLI](#)
- [What is CI/CD](#)
- [Difference between CI & CD](#)
- [CI/CD Pipeline](#)
- [Most Popular CI/CD tools in 2019](#)
- [CircleCI](#)
- [Updated AWS Commands](#)



Remember that we are here to help you
All you have to do is **ASK!**



Thanks for attending



