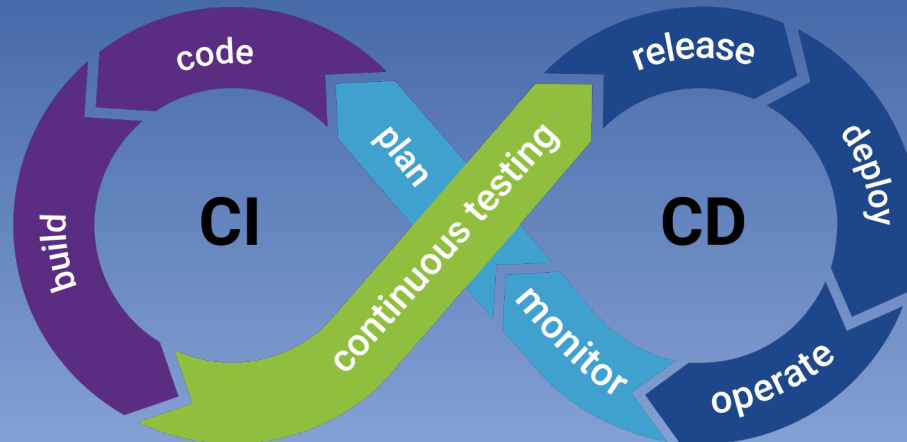# Udacity Project

Give Your Application Auto-Deploy Superpowers

By Nicholas Awuni

CI/CD

- CI/CD stand for continuous integration and continuous delivery/continuous deployment.

- CI is a practice that encourages developers to continuously integrate their code into a main branch of a shared repository early and often, instead of building out features in isolation and integrating them at the end of the development cycle.

- CD as an extension of CI, focuses on automating the software delivery process so that teams can easily and confidently deploy their code to production at any time.

Benefits of CI/ CD

- CI/CD as a process helps businesses reduce cost by easily catching compile errors after merge which prevents developers from spending more time on issues from developer.

- Certain cost to business can be avoided by using CI/CD process to catch unit test failures thereby reducing bugs in production and less time in testing

- Costly security holes in software can be avoided by using CI/CD to detect security vulnerabilities and avoid future cost that could be incurred .

- Smoke test as part of the CI/CD process protects company's revenue by reducing downtime from from a deploy-related crash or major bugs in software's.

- CI/CD can help increase business revenue through faster and more frequent production deployments of value generating features .