CI, CD, what and why

Continuous Integration, Continuous Delivery, and
why you
should care

CONTINUOUS INTEGRATION - CI

- Continuous Integration is, simply put, automating the process of building and testing of code.
- CI allows developers to frequently merge code changes into a central repository where builds and tests then run.

CONTINUOUS DEPLOYMENT - CD

- After code has been built, and tested, the next step is deployment.
- Continuous deployment is the process of automating the deployment of code into production, including automating infrastructure deployment, and helps complete the Continuous Delivery value chain.

WHY CI/CD???

- Automating CI means developers can catch errors easily and spend less time on issues, hence saving costs because of reduced man-hours
- Automating Unit Tests in CI means developers can catch production-breaking bugs in development and have less production bugs. Costs can be saved with this strategy
- Automating infrastructure deployment in CD means there will be less human error and faster deployment

WHY CI/CD???

- Automating Smoke Tests helps to reduce downtime from deployment crashes, and ensures production servers are always online, reducing the risk of money loss due to deployment downtimes.
- Automating rollbacks in CD makes it possible to quickly rollback to working state of service, and thus helps prevent production downtimes