

The background features abstract, overlapping green geometric shapes in various shades of green, creating a modern and dynamic feel. The shapes are primarily located on the left and right sides of the slide, framing the central text.

CI/CD Pipeline

A Strategy for Successful Software Engineering

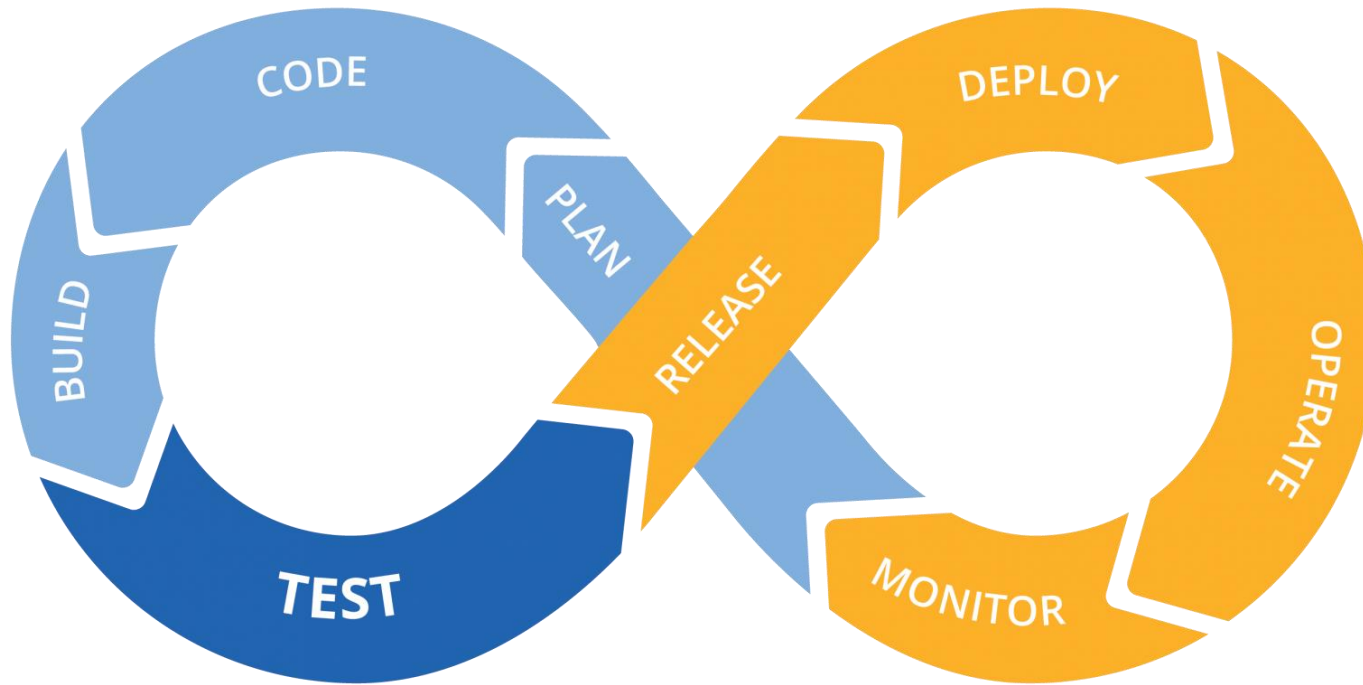
Lingchen Zhu

September 12, 2020

Software Project Challenges

- ▶ Slow Development Cycle
 - ▶ Slow release cycle → Customer dissatisfaction
 - ▶ Slow deployment → Customer dissatisfaction
 - ▶ High Cost
 - ▶ Low Revenue
- ▶ High Cost of Software Tests
 - ▶ Need to recruit a special team only for tests
 - ▶ Low Revenue
- ▶ High Cost of Software Deployment
 - ▶ Need to recruit a special team only for deployment
 - ▶ Low Revenue

Overall CI/CD Concepts



Why CI/CD?

- ▶ CI: Continuous Integration
 - ▶ Detects errors as quickly as possible
 - ▶ Allows team to work faster
 - ▶ Brings more confidence to dev team
- ▶ CD: Continuous Deployment
 - ▶ Ensures every change to the product is releasable
 - ▶ Delivers values more frequently to clients
 - ▶ Gets faster feedback from clients
 - ▶ Brings more confidence to clients

What can CI/CD bring?

- ▶ Very Quick & Smooth Development Cycle
 - ▶ **Each git push will deploy!**
 - ▶ Lead to an automatic deployment
 - ▶ Quick delivery → Better client satisfaction → More revenue
- ▶ Much Lower Cost of Software Tests
 - ▶ No/Reduced need for a special team only for tests
 - ▶ Reduce costs
- ▶ Much Lower Cost of Software Deployment
 - ▶ No/Reduced need for a special team only for deployment
 - ▶ Reduce costs
- ▶ Automation is everything!