Week 7 Day 1 DevOps

Intro to DevOps

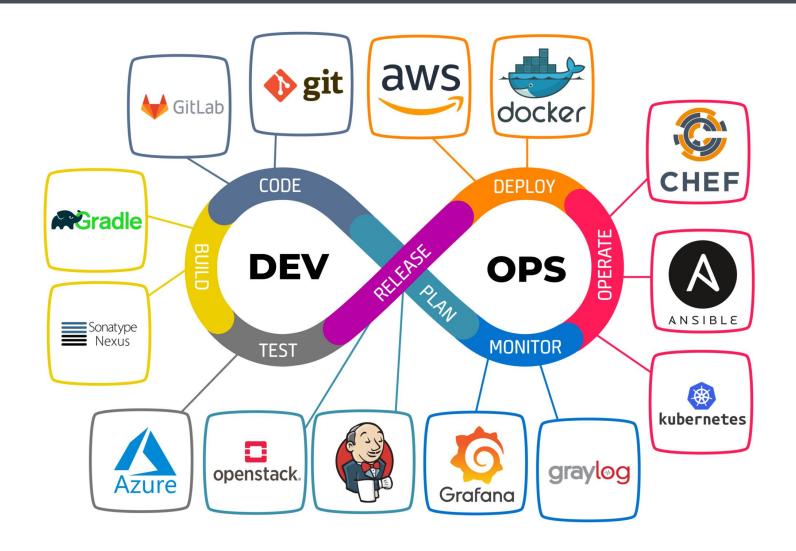


Combination of Development and Operations

- Combine production, deployment, and maintenance
- Expedite app development through automation
- Save money
- Decrease time between release

DevOps: Processes





DevOps: Continuous Integration



Process of consistently merging code into a central repository

- Team mentality
- Achieved when all members practice consistent merging
- Benefits
 - Most up to date code
 - Detect broken builds
 - Easily tested
 - Reduces development risk
 - Reduces overall bugs



DevOps: Continuous Delivery



Automated building, management, and testing of a software

- Take the code being pushed and
 - Build it
 - Test it
 - Deploy it to a production like environment
- Benefits
 - Reduced risk in deployment
 - Predictable progress
 - Frequent feedback

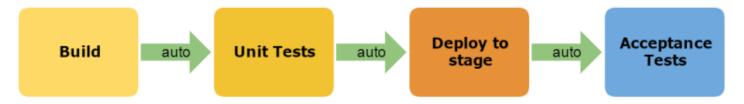
DevOps: Continuous Deployment



The final stage of completely automated software production

- One step farther than Continuous Delivery
- Benefits
 - Even faster development
 - Releases are less risky
 - Increased communication is a good thing
- Risks
 - Larger investment in engineering and testing
 - More documentation
 - Ongoing maintenance of pipeline
 - Feature flags are required

Continuous Integration



Continuous Delivery



Continuous Deployment



Image source: https://i.stack.imgur.com/yOofB.png