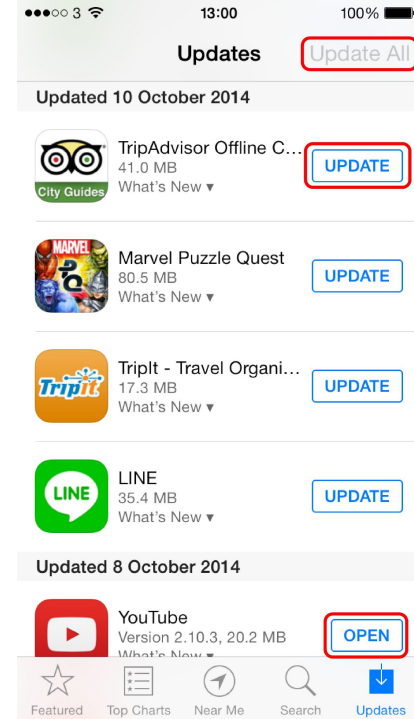


Software Engineering Design DevOps

Group 3

Presenter: 陳凱

Paradigm shift

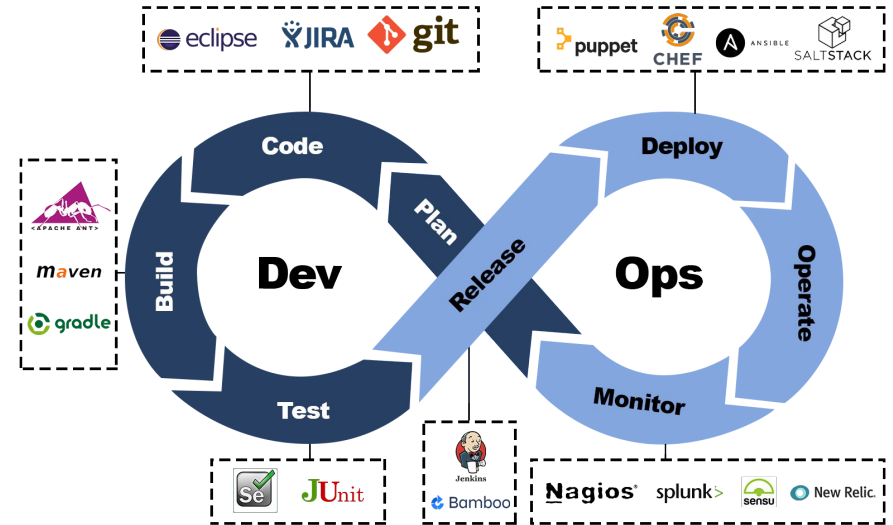
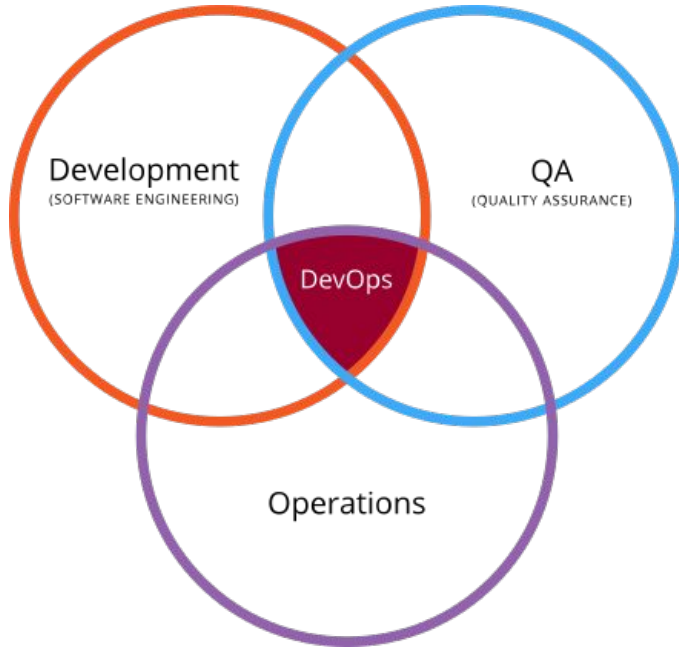


source from: google search

What is DevOps

- DevOps integrates the two words of **development** and **operations**, using automated development, deployment, and infrastructure monitoring.
- This approach helps deliver value faster and continuously, **reducing problems due to miscommunication** between team members and **accelerating problem resolution**.

DevOps



source from: google search

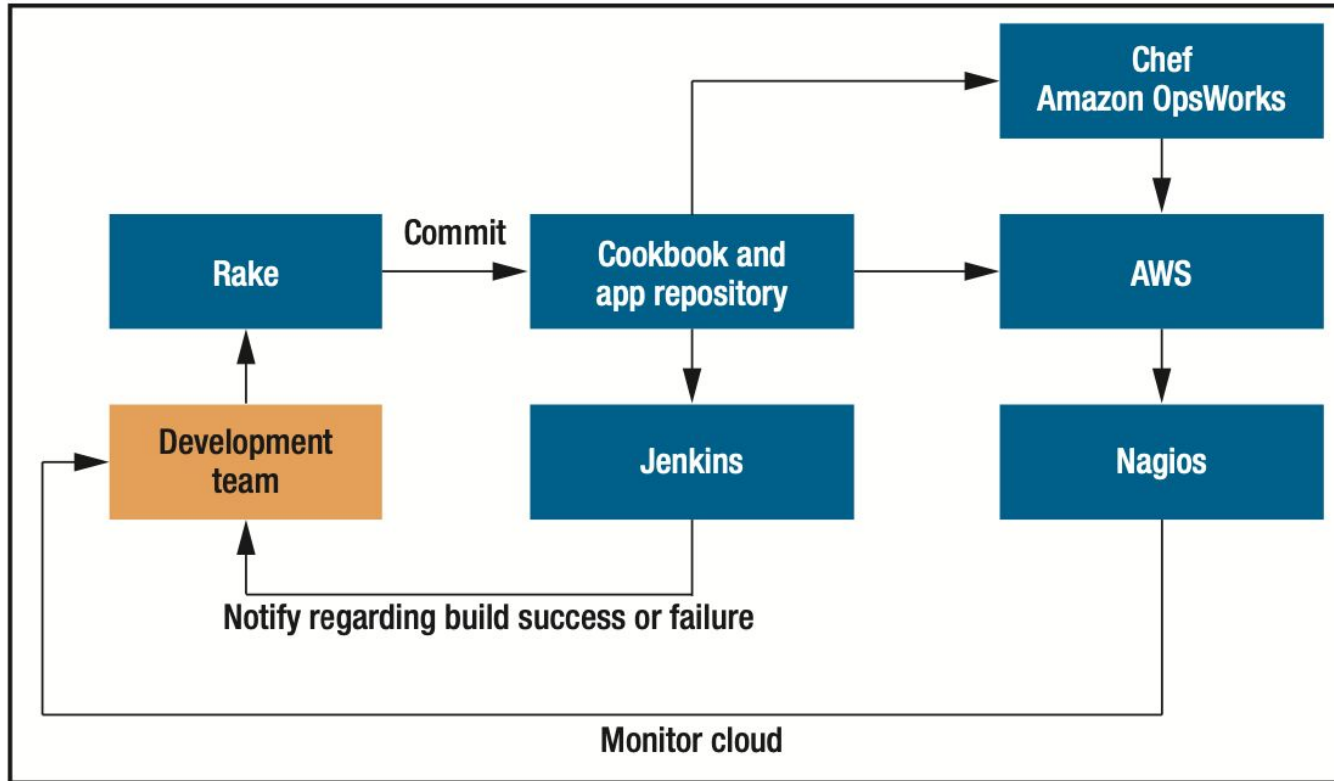


FIGURE 2. A DevOps architecture that uses Amazon Web Services (AWS) tools to implement continuous delivery.

DevOps Standard

- Standardized in IEEE Std 2675-2021, 16 April 2021
- **DevOps:** Set of principles and practices which enable better communication and collaboration between relevant stakeholders for the purpose of specifying, developing, and operating software and systems products and services, and continuous improvements in all aspects of the life cycle.



[2] "IEEE Standard for DevOps: Building Reliable and Secure Systems Including Application Build, Package, and Deployment," in IEEE Std 2675-2021 , vol., no., pp.1-91, 16 April 2021, doi: 10.1109/IEEEESTD.2021.9415476.

AI in DevOps

“AI engineering offers a pathway, making AI a part of the mainstream DevOps process rather than a set of specialized and isolated projects.”



Reference

- [1] C. Ebert, G. Gallardo, J. Hermantes, N. Serrano, "DevOps," in *IEEE Software*, vol. 33, no. 3, May-June 2016
- [2] "IEEE Standard for DevOps:Building Reliable and Secure Systems Including Application Build, Package, and Deployment," in IEEE Std 2675-2021 , vol., no., pp.1-91, 16 April 2021, doi: 10.1109/IEEESTD.2021.9415476.
- [3] K. Panetta, "*Gartner Top Strategic Technology Trends for 2021*," Oct. 19 2021, <https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>