

DevOps Training

Suryaraj Timsina

Agenda

1. Syllabus
2. Introduction
3. Why Learn DevOps?
4. What is DevOps?

Introduction

Let's know each other

Why Learn DevOps?

1. Transiting from different job roles (developer, tester or non IT professional) to DevOps.
2. DevOps is one of the top skills employers are looking for in the IT industry.
 - [Devops-Market-Research-501009](#)
 - [2020 DevOps Trends Survey by Atlassian and CITE Research](#)
3. One of the highly paid job as per survey.
 - Indeed
 - Glassdoor
 - Quora
4. Any companies making software better constantly and continuously at an enormous phase.
5. Anyone who wants their product and their feature delivered faster to users needs DevOps.

What is DevOps?

Is it

- a tool?
- a technology?
- a company?
- about automation and scripting?
- creating software?

What is DevOps? Contd...

Software development life cycle



What is DevOps? Contd...

Models of SDLC

1. Waterfall
2. Agile
3. Spiral
4. Big Bang etc

These models can be assumed as the path or roadways to the same destination.

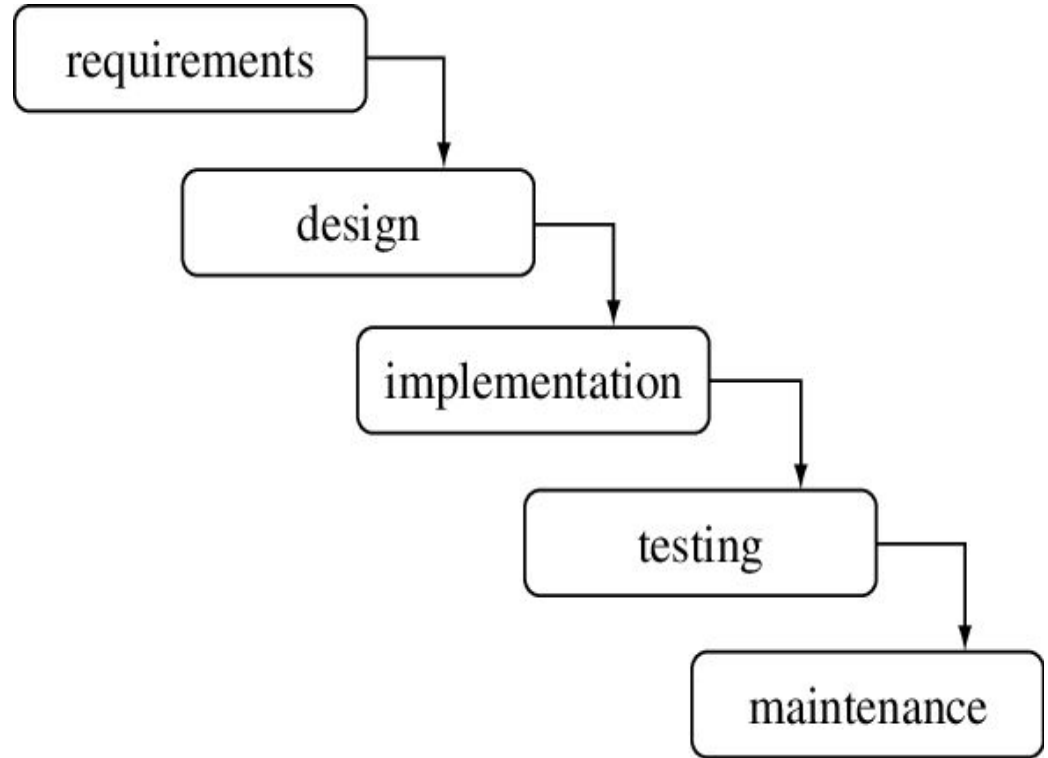
Some factors for consideration.

1. Cost
2. Risk
3. Time taken to reach the destination

What is DevOps? Contd...

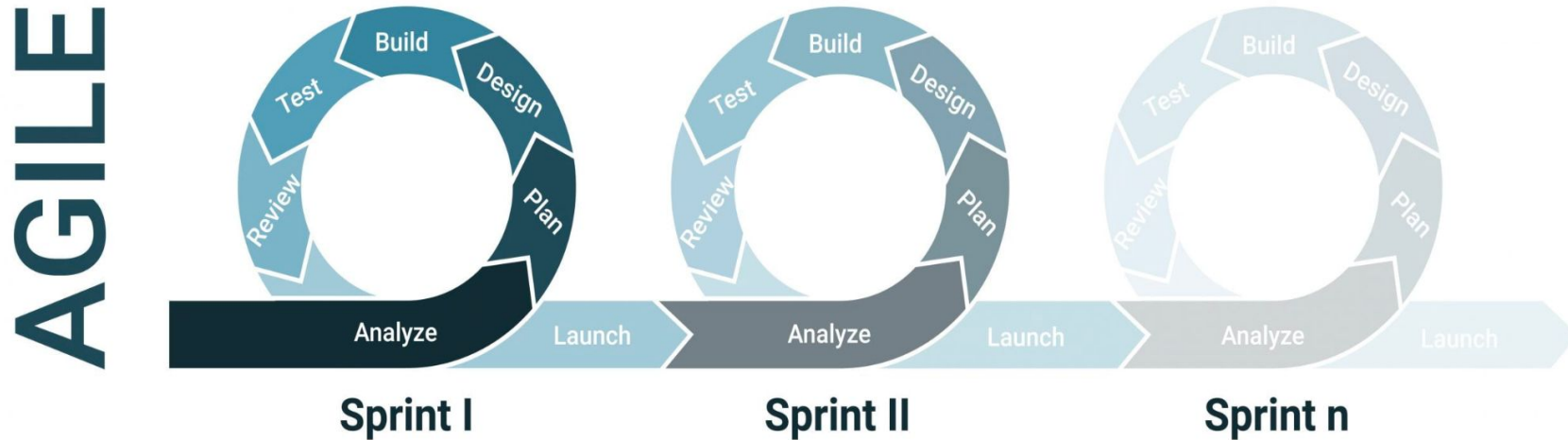
Waterfall model

- The next phase is started only after previous phase is completed
- Testing is done once all development is completed.
- Cannot accommodate changing requirements.
- No working software is produced until the late during the life cycle.



What is DevOps? Contd...

Agile model



- Requirements divided into smaller lists.
- Work on a list for 2 to 4 weeks.
- Each iteration could be 2 to 4 weeks.
- Demonstration can be done after each iteration.
- Feedback can be accommodated in next iteration.

What is DevOps? Contd...

Dev vs Ops

Development

- Agile
- Regular and quick changes
- Developer passes code to Ops to deploy on the server
- Developer complains about delay in deployments.

Operation

- Waterfall
- ITIL stability
- Ops complain about unclear instructions.

Regular deploy requests.

No clear instructions which causes the deployment failure.

Ops team occupied with production support(system uptime).

ITIL process driven(Information technology infrastructure library)

Frequent delay and errors resulting business loss

What is DevOps? Contd...

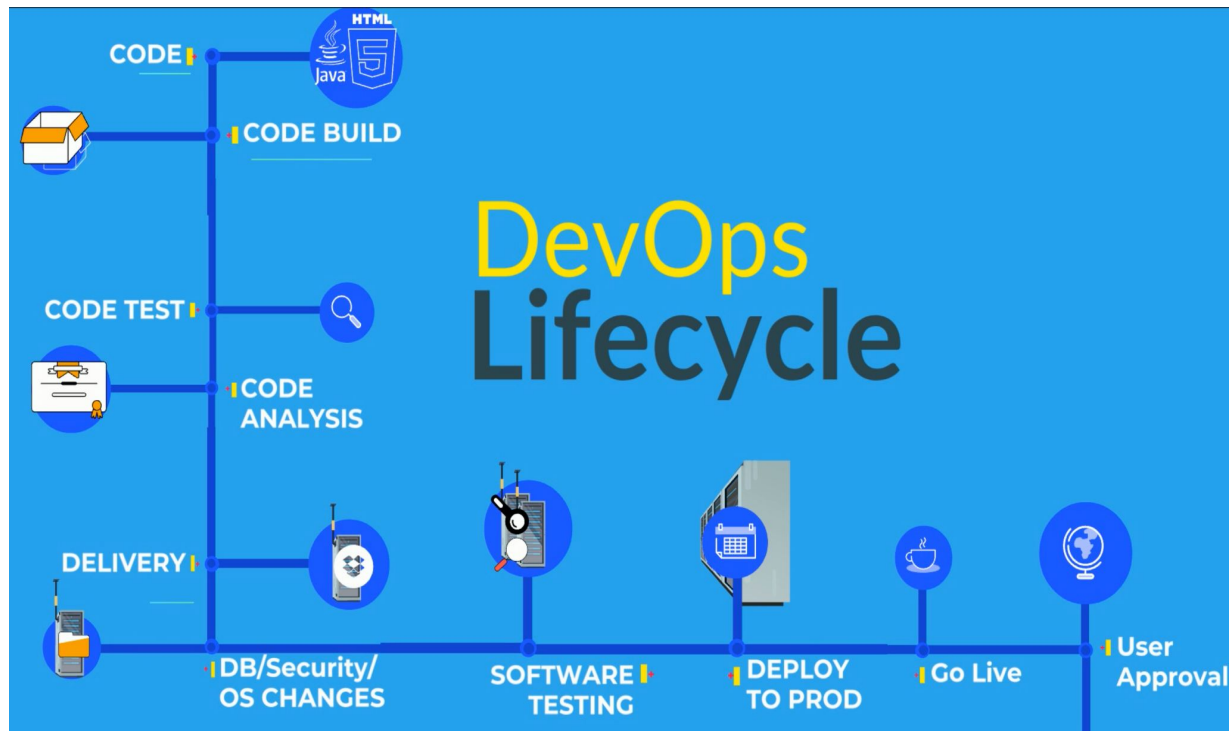
DevOps lifecycle

Dev Team: understand Ops stability

Ops Team: understand Dev Agility

Automation of each and every tasks of code delivery process.

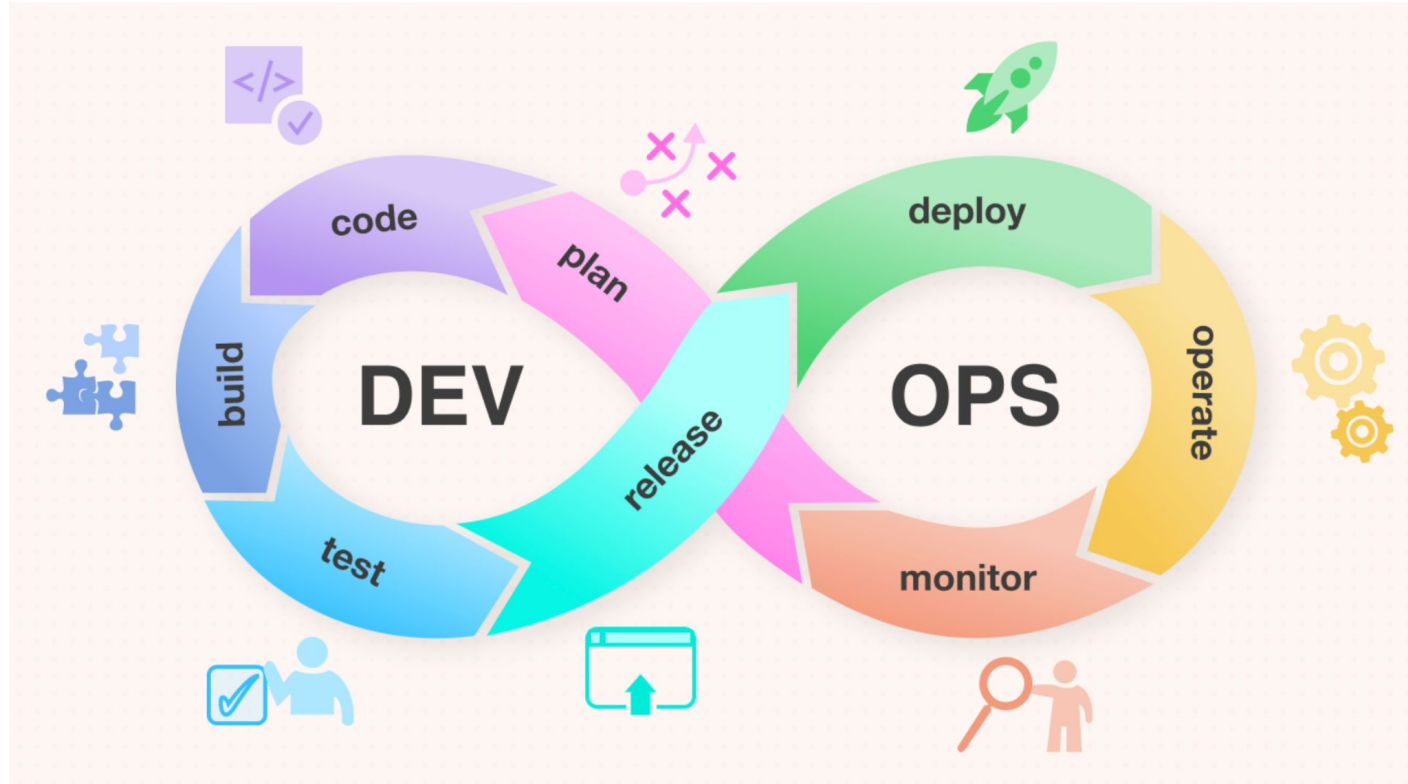
- Code build
- Code testing
- Software testing
- Infra changes
- Deployment
- Everything...



What is DevOps? Contd...

DevOps lifecycle

- Collaboration
- Communication
- Integration



Questions?

References

1. <https://www.industryarc.com/Research/Devops-Market-Research-501009>
2. <https://www.atlassian.com/whitepapers/devops-survey-2020>