

S.E.M.P - Experiment No. 1

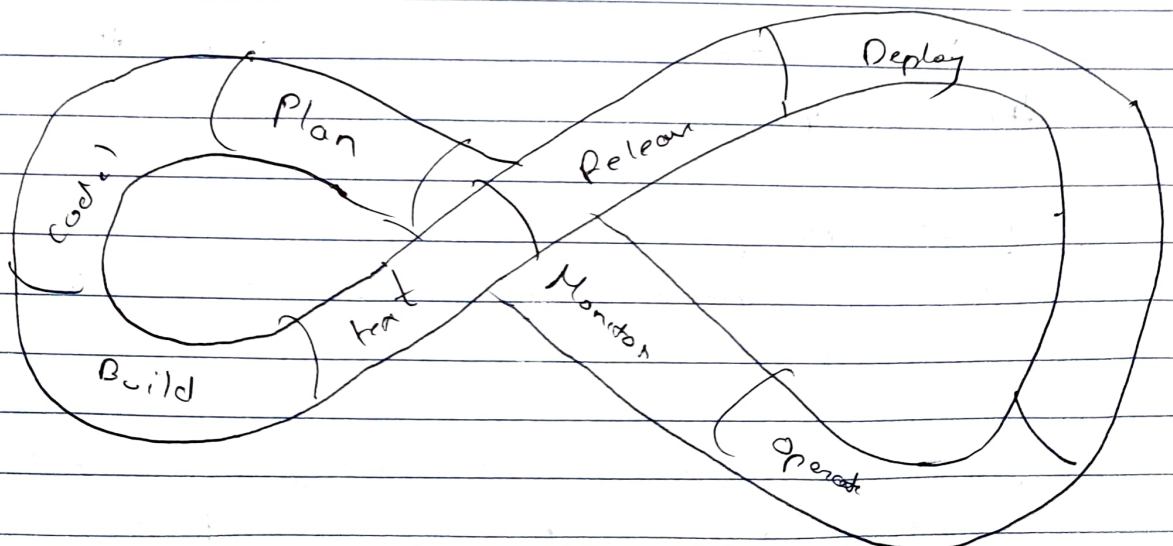
Aim:- To understand Devops, principles, practice and devops. roles & responsibilities

Theory

Definition:

- Devops is the combination of 2 words, one is development & other is operation
- Devops helps to increase organization speed to applications & service
- Devops can also be defined as a sequence of development & operations with better communications & collaboration
- Devops can also be defined as a sequence of development business disciplines for enterprises or organization

Architecture



Devops architecture

2] Build - Without DevOps, the cost of consumption of resources was evaluated based on pre-defined individual usage with fixed hardware allocation and with design. The usage with fixed of cloud, sharing of resource comes into the picture.

2] Code - Many good practices such as git enables code to be used, which ensures writing code for business, helps to track changes, getting notified about reason behind differences in the actual & the expected output.

3] Test - The application will be ready for production after testing. Ex. the cost of manual testing is consumed more time in testing & moving the code to the output.

4] Plan - DevOps use agile methodology to plan the development with the operations & development team in sync.

5] Monitor - Continuous monitoring is used to identify any risks of failure. Also helps in tracking system accurately so that the health of application

6]. Deploy: Many systems can support the scheduler for automated deployment. The cloud management platform enable users to capture accurate insights & view the optimization scenarios. analytics on trends by deployment of dashboards.

7]. Operate: DevOps changes the traditional approach of developing & testing separately. The teams operate in a collaborative way where both team actively participate throughout service lifecycle.

8]. Release: Deployment to an environment can be done by automation. But when deployment is made to production environment, it is done by manual triggering. Many processes involved in release management.

Principles

- Collaboration
- Data-based decision making
- Customer centric decision making
- Constant improvement
- Responsibility throughout the lifecycle
- Automation

Adv

DevOps is an excellent approach for quick development & deployment of apps.

It responds faster to market changes to improve business growth.

Develops clear descriptive process, which gives clarity on product development & delivery.

Disadvantage

Develops professional experts developers are less available.

Developing with DevOps is also expensive.

Lack of developer knowledge can be a problem in continuous integration of automation project.

Conclusion

Hence, we have known what DevOps is its advantages & disadvantages.