

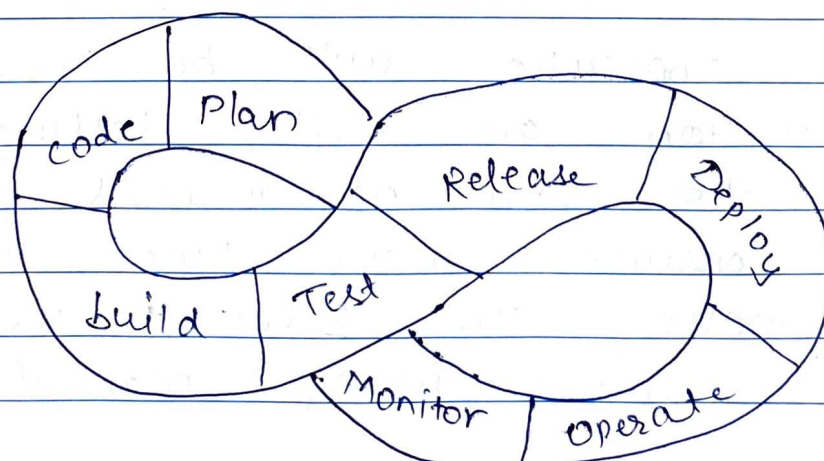
SEPM Assignment - 1.

Aim: To understand Devops, principles, practices & Devops roles and responsibilities.

Theory:

Definition: Devops is the combination of 2 words one is development and other is Operations. It is a culture to promote the development and operation process collectively.

Devops helps to increase organization speed to deliver applications & services. It also allows organizations to serve their customers better and complete more strongly in the market.



1. Build:

without Devops, the use of the consumption of the resources was evaluated based on the pre-defined hardware allocation and with devops, the usage of cloud, sharing of resources comes into the picture, and the build is depend upon the user's need.

2. Code:

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

3. Test:

The application will be ready for production on after testing.

In the case of manual testing it consumes more time in testing & moving the code to the output. will remove many manual steps.

4. Plan :

⇒ Devops use Agile methodology to plan the development with the operations and development team in Sync.

5. Monitor :

⇒ Continuous monitoring is used to identify any risk of failure. Also, it helps in tracking the system accurately so that the health of the application can be checked.

6. Deploy :

⇒ Many systems can support the schedules for automated deployment. Analytics on trends by the deployment of dashboards.

7. Operate :

⇒ Devops changes the traditional approach of developing and testing separately. The operation team interacts with developers as they come up to business requirement.

8:

Release:

Deployment to an environment
can be done by automation,
But when the automation is
made to the production environment
it is done by manual triggering.

Principles:

- Collaboration
- Data based decision making
- Customer Centric Decision making
- Constant improvement
- Responsibility throughout the life cycle
- Automatic
- failure as a learning opportunity.

* Advantages:

- Devops is an excellent approach for quick development & deployment of applications.
- Devops clears the descriptive process which gives clarity on product development & delivery.

- It improves customer experience & satisfaction.
- Devops means collective responsibility which leads to better team engagement & productivity.

* Disadvantages:

- Devops professional or experts developers are less available.
- Adopting new devops technology into the industries is hard to manage in a short time

Conclusion:

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