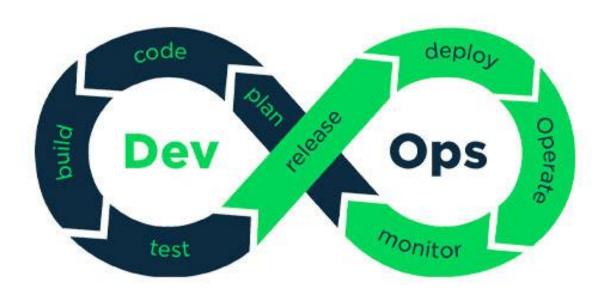# Introducing DevOps

AGENDA:

- What is DevOps?
- Benefits of DevOps
- Time comparison with & without DevOps
- Use Case

What is DevOps?

DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at high velocity

Benefits of DevOps:

- **Speed:** We do not need to use developers to performs daily tasks

- **Rapid Delivery:** Automatization makes release quicker

- **Reliability:** Ensure the quality of the process, reduce human errors

- **Scale:** If releases demand increase not extra time is needed

- **Security:** You can perform scan of vulnerabilities in every iteration

Time spent in taking care of these tasks:

	Without DevOps	With DevOps
Code	-	-
Code Review	5 mins	Manual + CI
Compile/Lint	5 – 10 mins	CI
Merge/Integrate	5 – 10 mins	CI
Run Unit Test	5 – 10 mins	CI
Run Integration Test	5 – 10 mins	CI
Scan Dependency Security	5 – 10 mins	CI
Deploy to Test Env	10 – 30 mins	CD
Team Test	10 – 20 mins	CD
Create Infrastructure	10 – 30 mins	CD
Deploy to Production	10 – 30 mins	CD
Smoke Test in Prod	5 – 10 mins	CD
Rollback	10 – 30 mins	CD
Promote to Prod	10 – 20 mins	CD
TOTAL	**95 – 225 mins**	**0 mins**

Use case:

 - Considering 5 developers team and 5 releases per day
 - Working 20 days per month will require 100 releases per month

	Hours dedicated to take care of tasks	Days per month
Manual Optimistic Time	95 mins x 100 = 158 hours	19.75 days
Manual Worse Time	225 mins x 100 = 375 hours	46.875 days
With DevOps	0 x 100 = 0 hours	0 days

If in average it takes around 3 days to close a 3 points User Story we are:

 - Optimistically losing 6.58 tasks per month because we are doing not automated tasks.
 - In workse case losing 15.63 tasks per month because we are doing not automated tasks.
 - With DevOps we do not need to spend time in automated test and we can increase our performance and rentability.