

Introduction to Azure DevOps CI/CD Pipelines



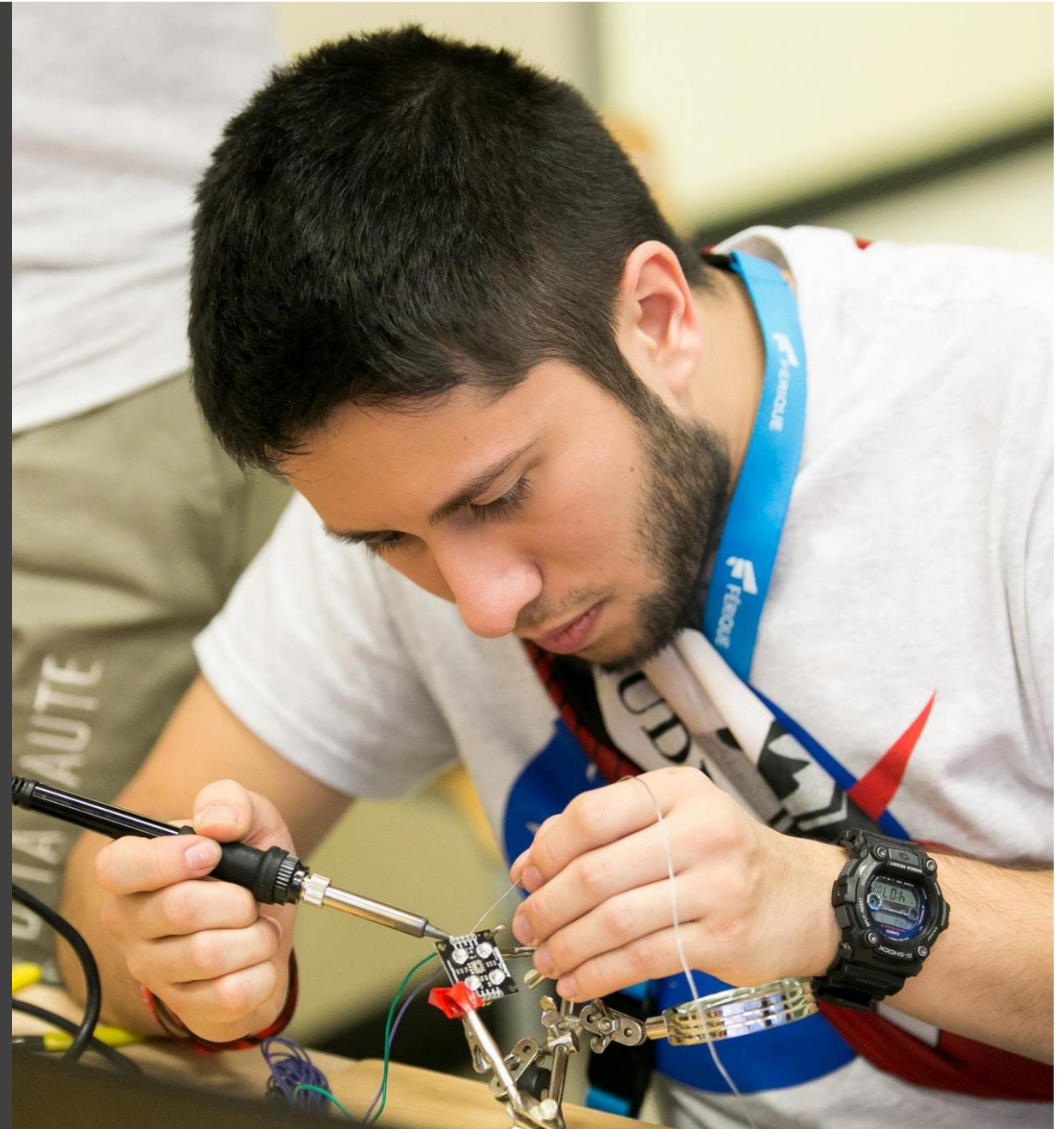
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Software Developer and DevOps

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Genetec[™]

Who am I?

- 
 - Software Developer at Genetec
 - DevOps team in AutoVu
- 
 - Computer Engineering
 - Graduated from Polytechnique in 2018
 - CS Games, Machine EPM, CQI, CCI
- 
 - French horn in an orchestra
 - Video games
 - Ski



What do I do at Genetec?

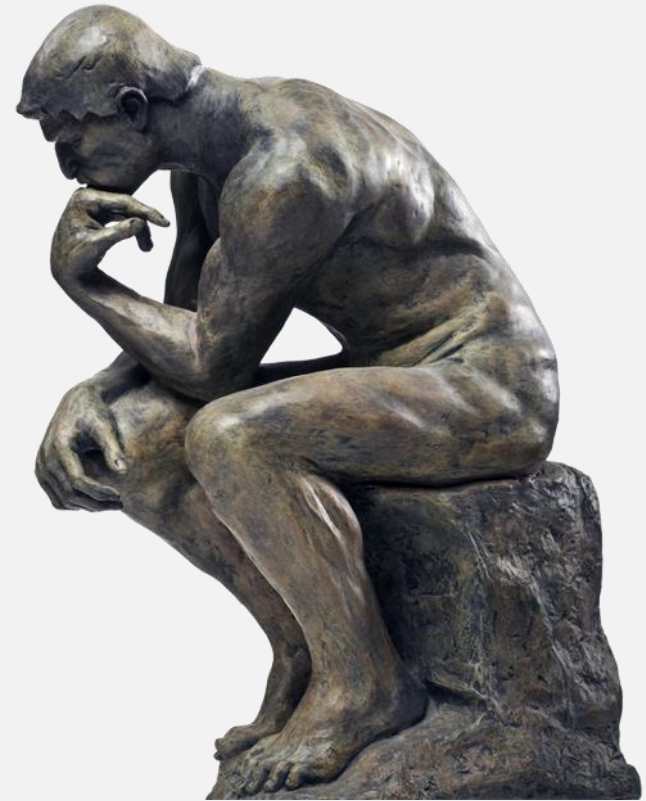
- AutoVu
- ALPR
- Parking, law, surveillance





My goal

- Teach you the basics of CI/CD
- Inspire you to apply this to all of your projects!

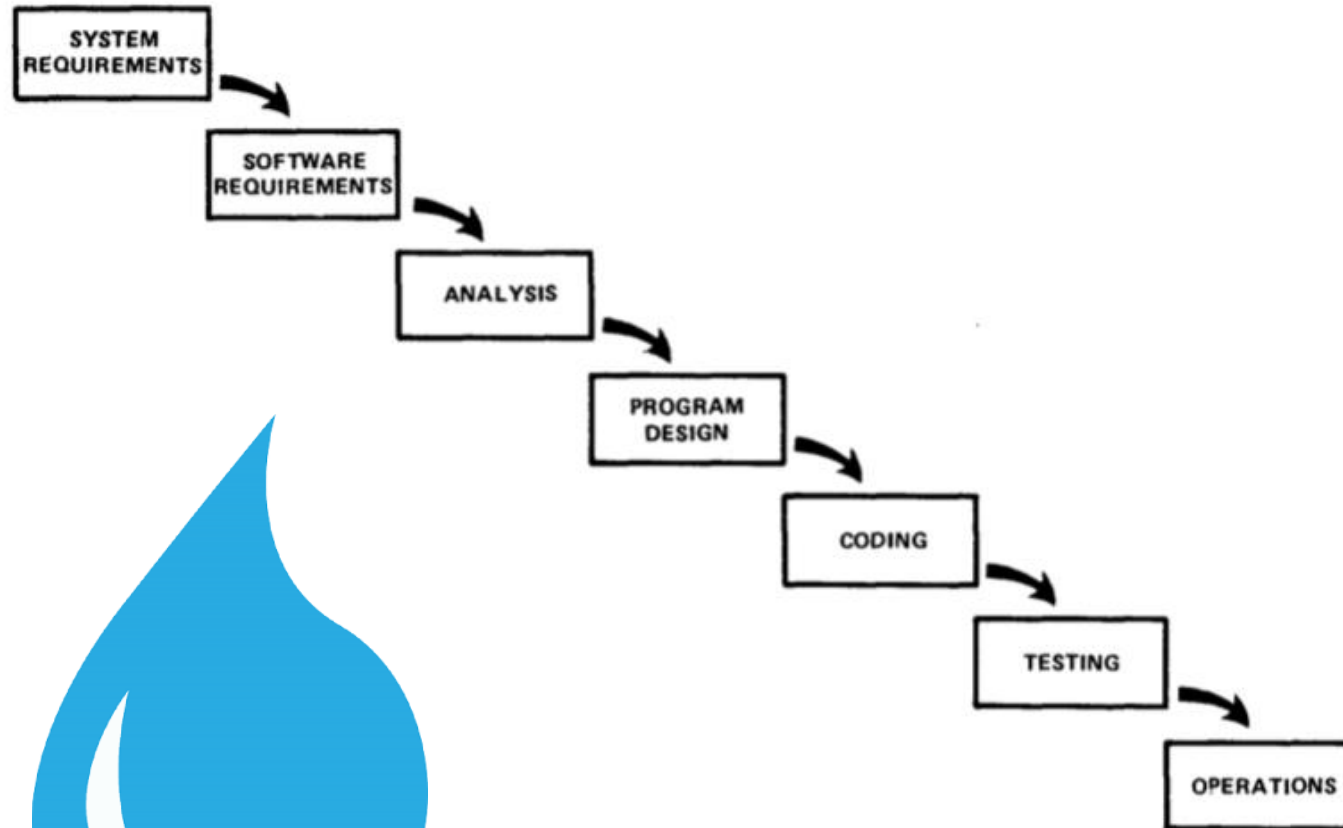


Scope

1. DevOps
2. CI
3. CD

What is DevOps?



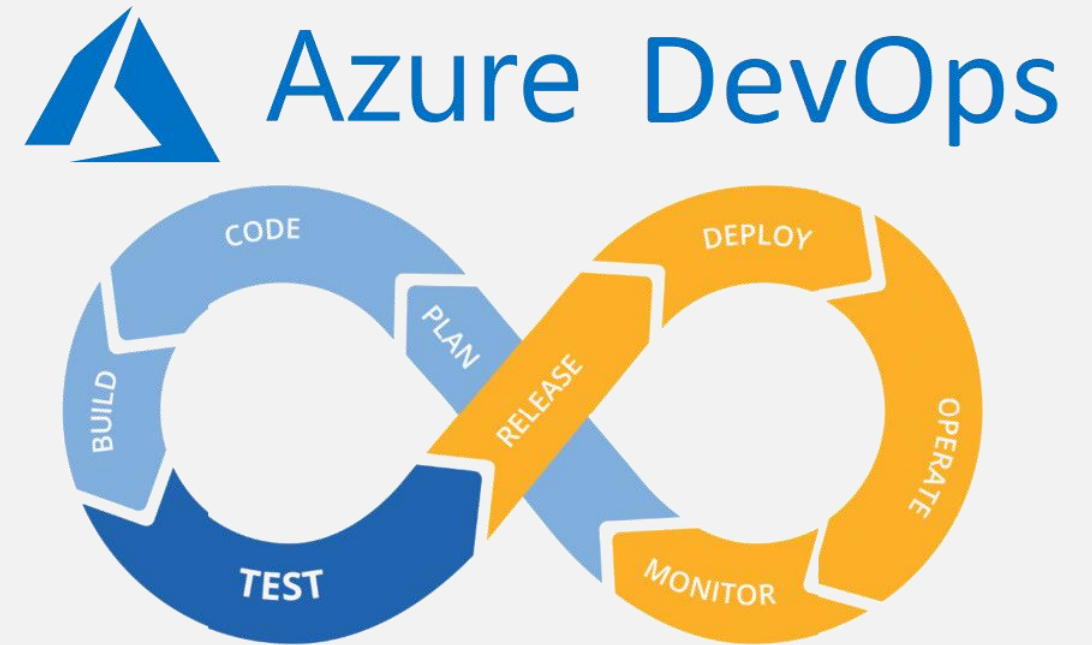


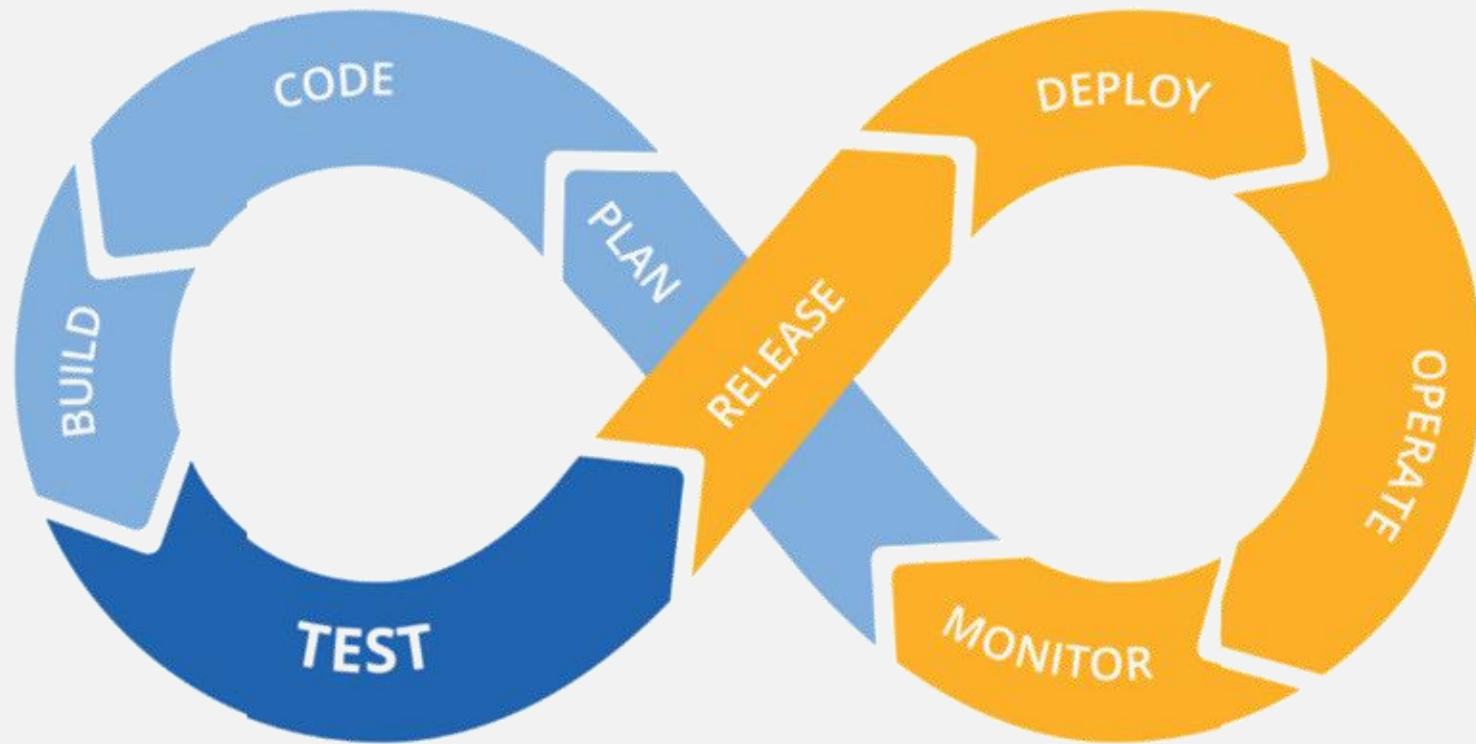
on steps to develop a large computer program for delivery to a customer.

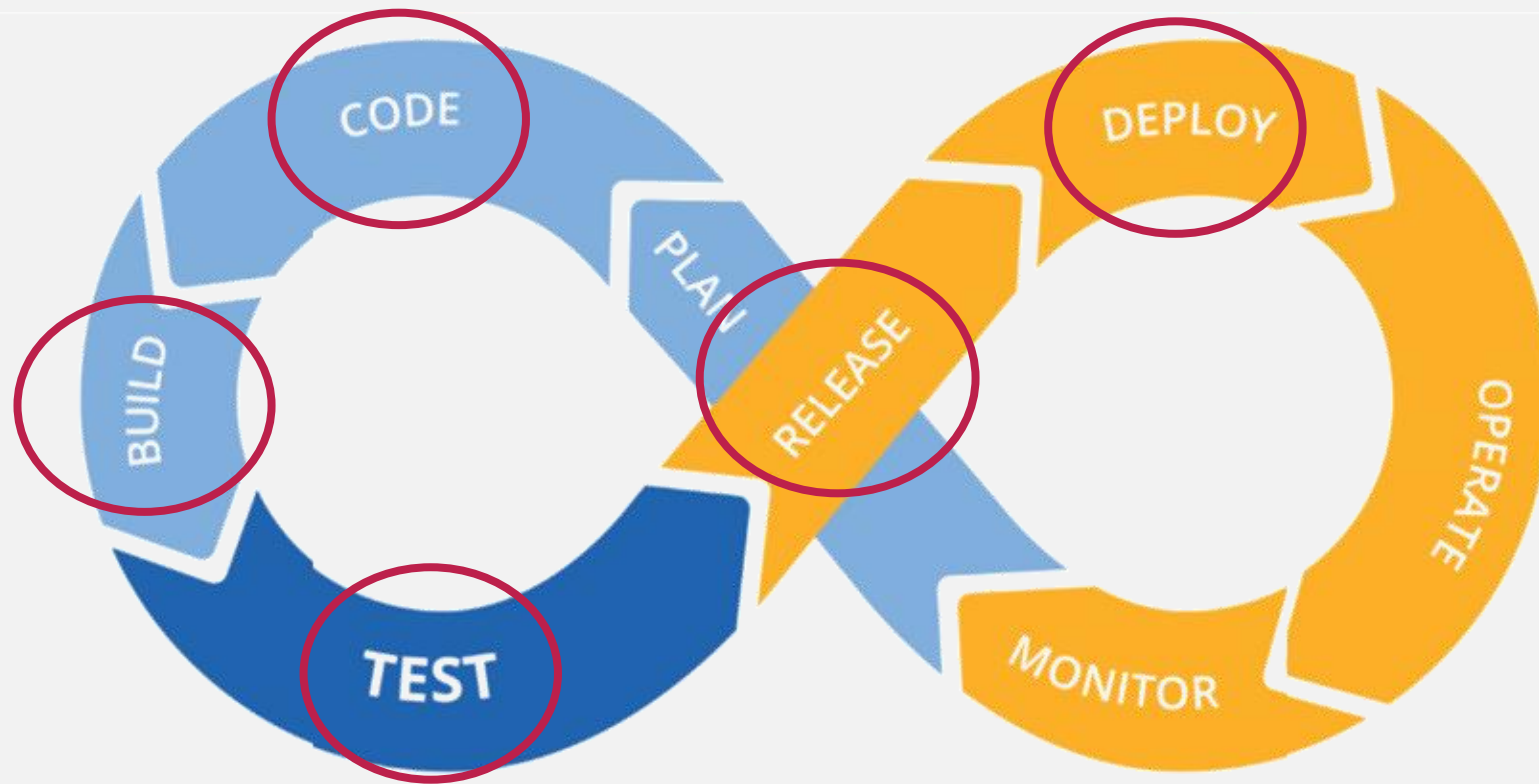


DevOps

- Collaboration between development and operations
- Use of automation
- Small deployments







Why DevOps?

- Speed of the development cycle
- Communication and collaboration



In my team...

- Over 30 microservices
- Deployments 4 times/week



CI/CD



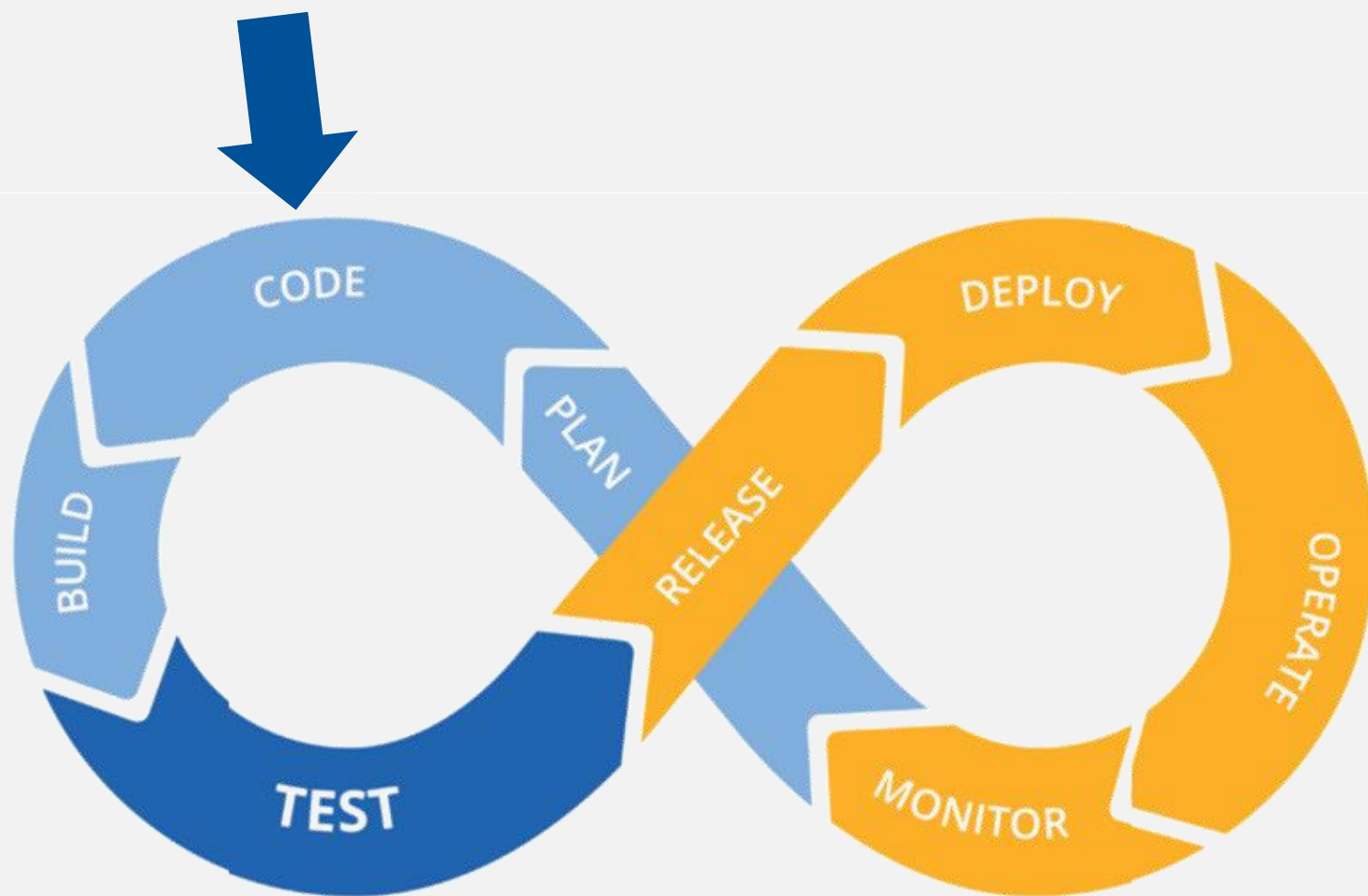
CI

CI – Continuous Integration

- For every commit
 - Build
 - Test
 - Publish

Demo CI





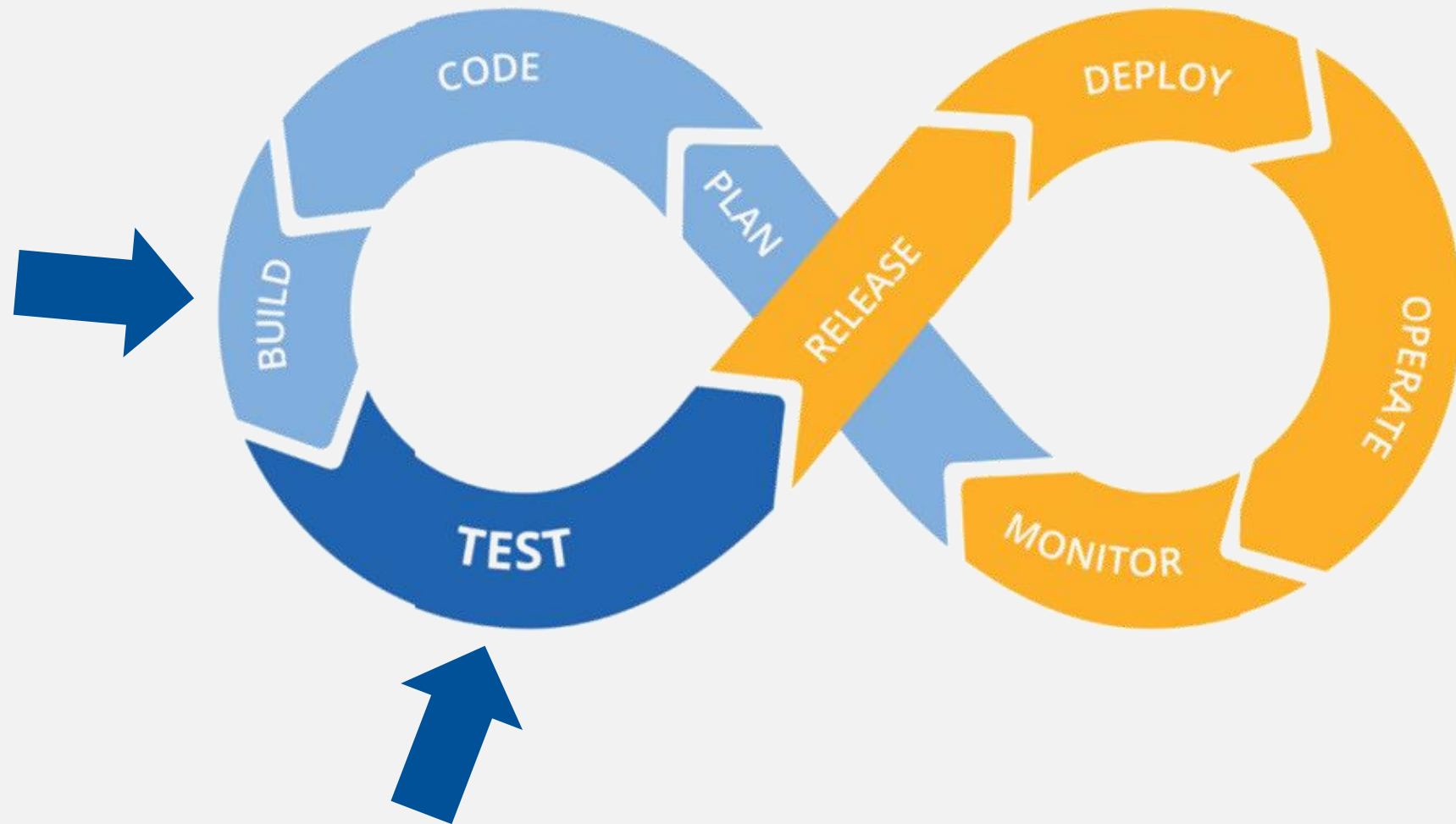
Dotnet



.NET

What we just did

- Version 1 of the Web App
- Pushed it all to GitHub



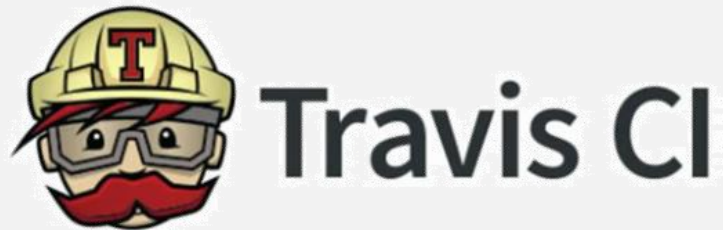
DevOps Environment



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Chose whatever



What we just did

- Linked GitHub to Azure DevOps
- Created a YAML build pipeline

CI

CI/CD



CD

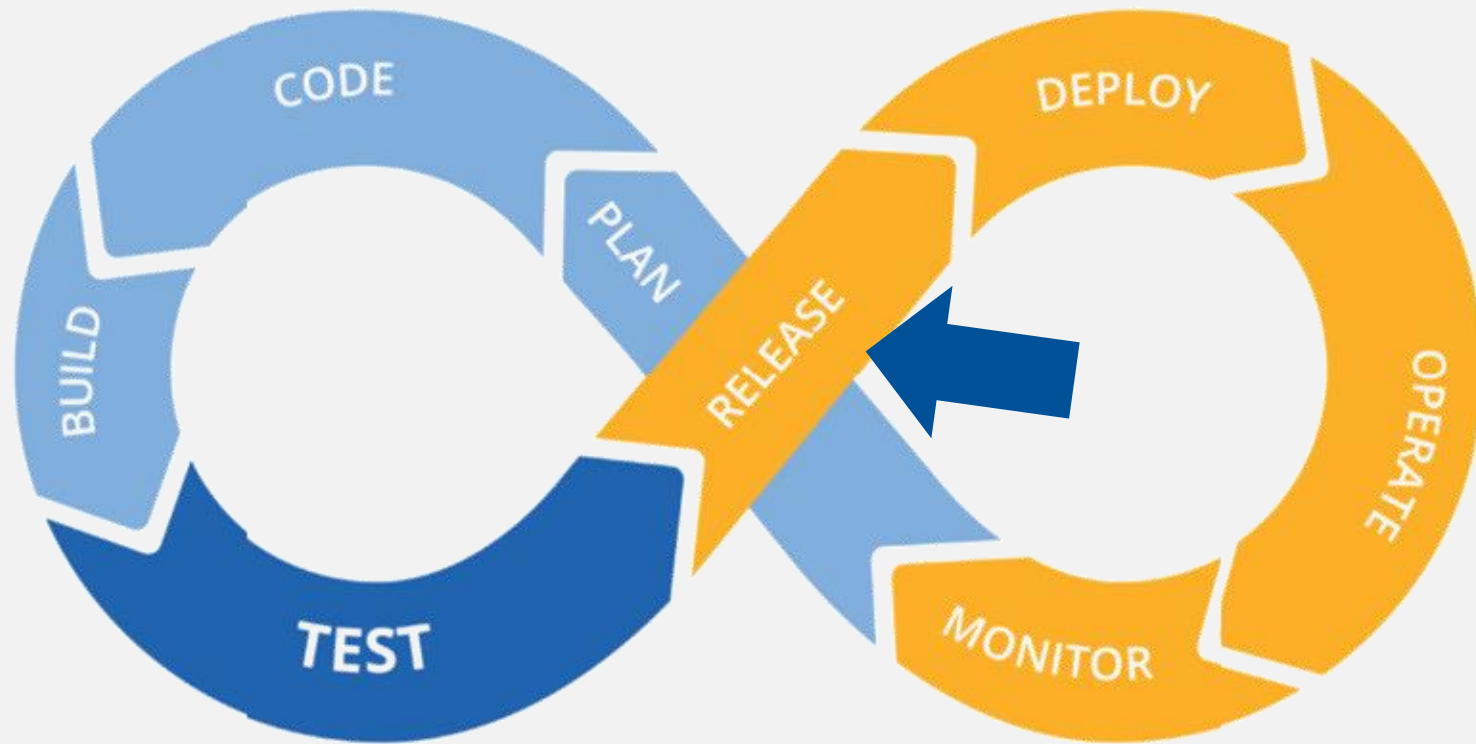


CD – Continuous Deployment

- For every build on master
 - Deploy the app to Azure!

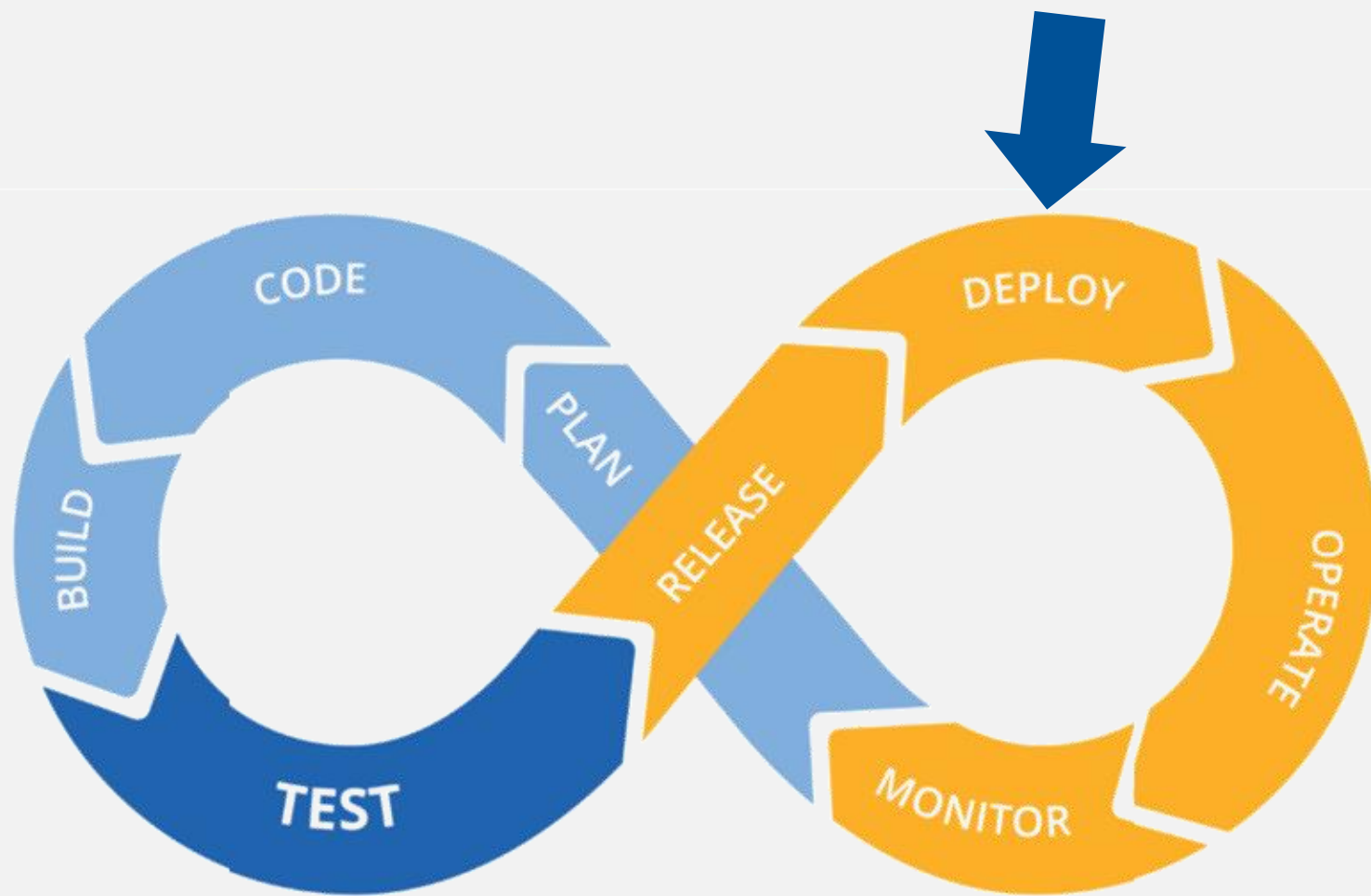
Demo CD





What we just did

- Published an artifact for each build



What we just did

- Created an automatic release pipeline
- Added a simple deploy step to Azure

Conclusion



Recap

- DevOps: super important for rapid innovation
- CI/CD: you just can't live without it now
- Azure DevOps: very powerful tool!

You got this



Useful links

- [What is DevOps?](#)
- [Azure for Students](#)
- [Build, test, and deploy .NET Core apps](#)

Bye

