Lesson 01.A Introduction

DEVOPS - ITI 4
HEI 2021-2022

Your humble servant

- Denis Cauchois
  - Denis
  - Tu

- Team Manager at Worldline
  - BUILD & RUN
  - Retail Project

What does DEVOPS mean ?

Context 1/2

ENVIRONNEMENT	DEV	TEST	PRODUCTION
WORKERS	PROGRAMMERS	TESTERS AND PRINCIPALS	OPS
USERS	N/A	N/A	**CUSTOMERS**

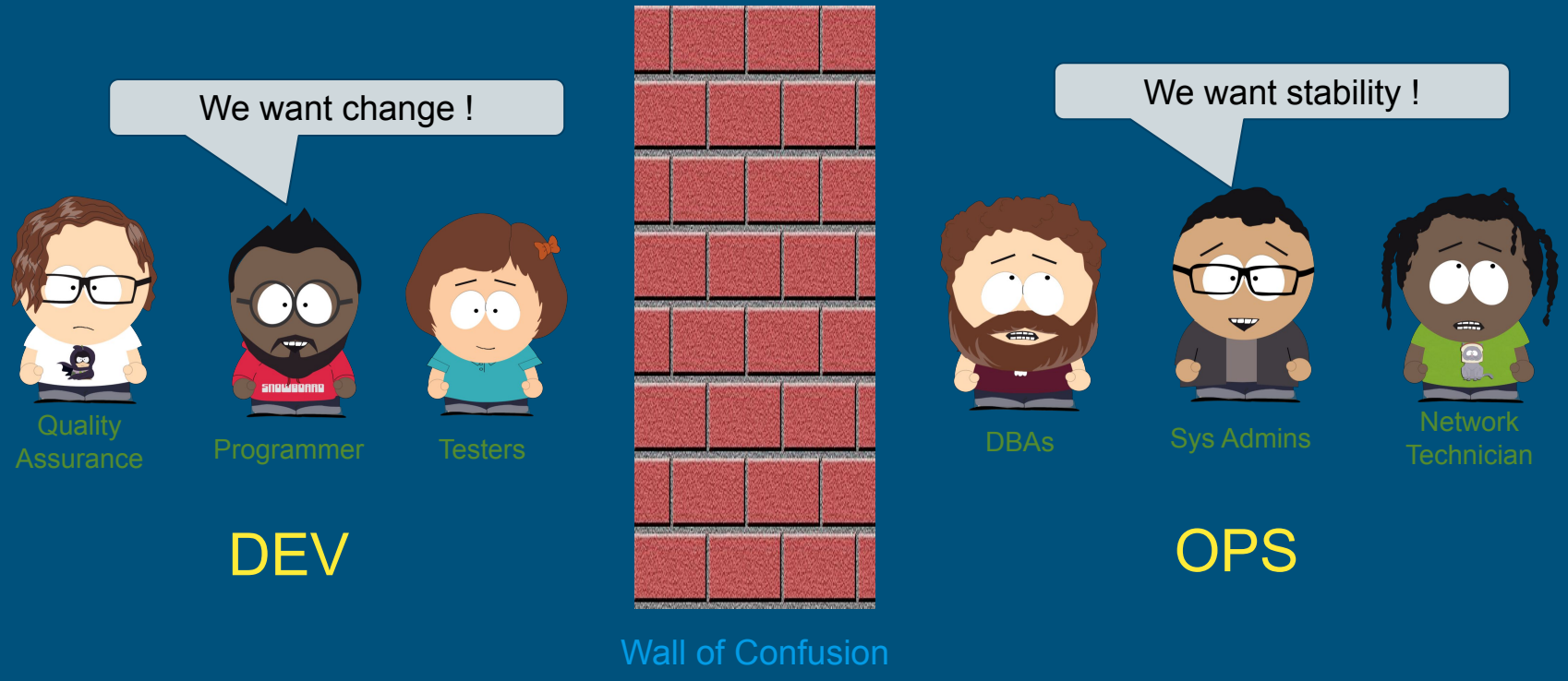
Context 2/2

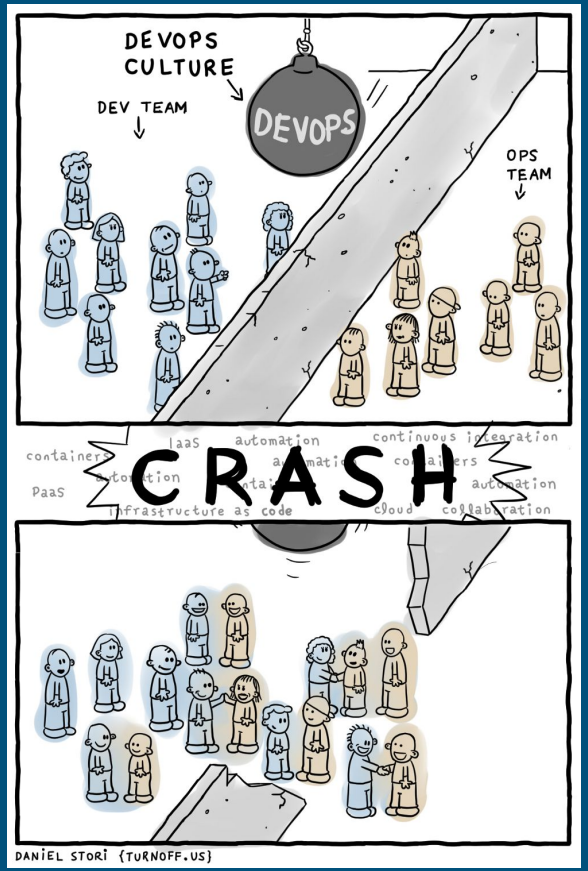
- Analyze
- Specify
- Develop
- Setting up environments

- Deliver applications to environments

- Protect production
- Get the necessary business metrics

In IT project, we have





DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality.

Len Bass, Ingo Weber, Liming Zhu
DevOps
A Software Architect's Perspective

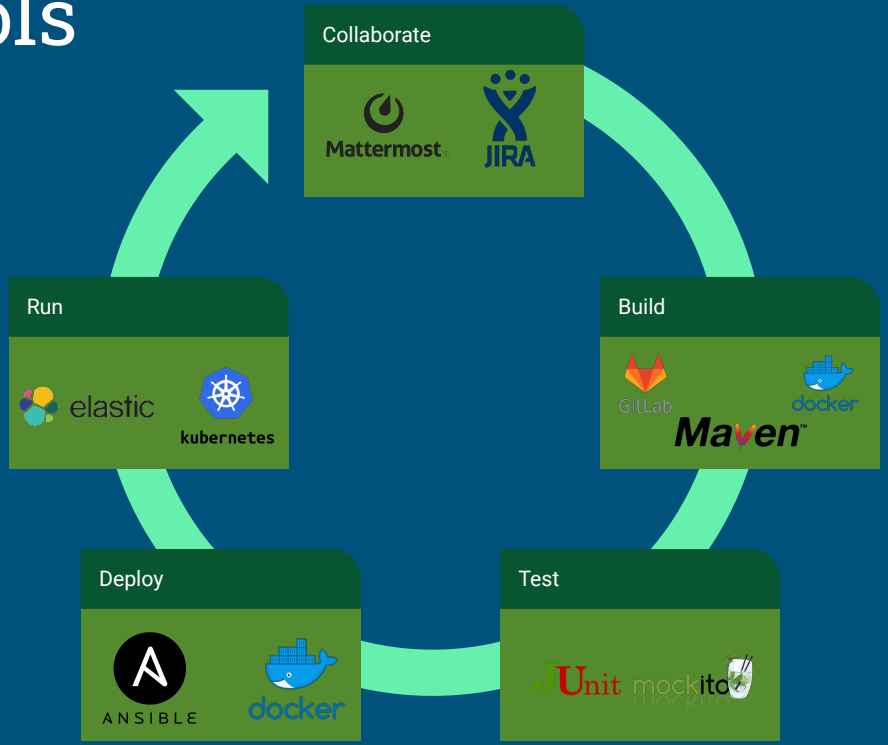
Quizz !!!

https://forms.gle/nVaZaWmHty3xaFJH8

DevOps Core values

- Culture
  - Shared responsibility
- Automation
  - Continuous integration
  - Continuous deployment
- Lean
  - Continuous improvement
  - Visual Management
- Measurement
  - Metric storage
- Sharing
  - User-friendly communication channels
  - Source Configuration Management tools

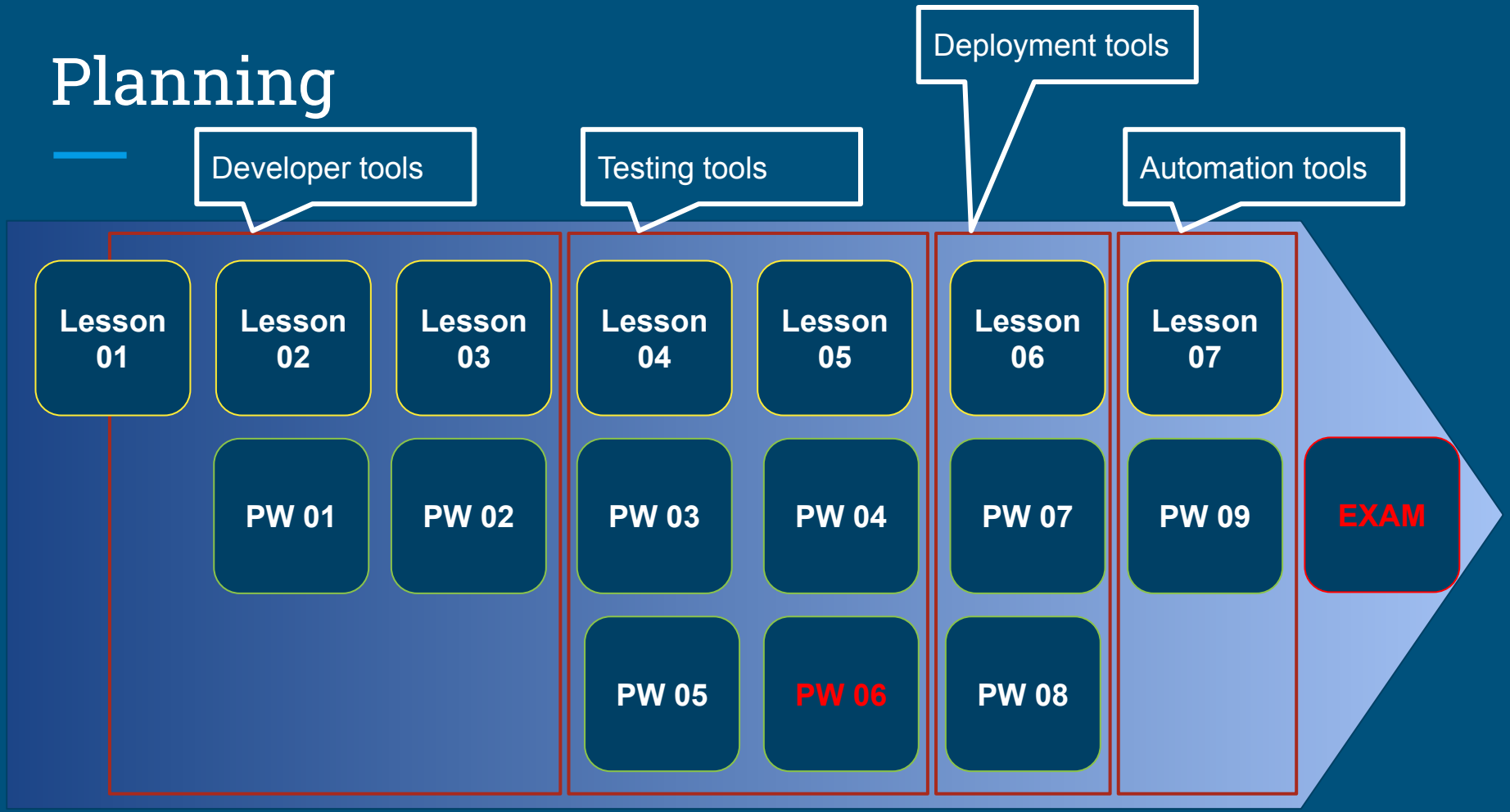
Devops tools



How are we going to work together ?

Les performances individuelles, ce n'est pas le plus important. On gagne et on perd en équipe.
Zinedine Zidane

Planning


Developer tools
Testing tools
Deployment tools
Automation tools
Lesson 01
Lesson 02
Lesson 03
Lesson 04
Lesson 05
Lesson 06
Lesson 07
PW 01
PW 02
PW 03
PW 04
PW 07
PW 09
EXAM
PW 05
PW 06
PW 08

Developer tools

- Lesson 01 :
  - Software Project Management with Maven
- Lesson 02 :
  - Version Control System with Git
- Lesson 03 :
  - Configuration Management with Java Properties
  - Log Management with Log4J
- Practical Work 01 :
  - Discovery of teamwork
- Practical Work 02 :
  - Log Management and Configuration Management

Testing tools

- Lesson 04 :
  - Unit testing (1/2) with JUnit
- Lesson 05 :
  - Unit testing (2/2) with AssertJ and Mockito
- Practical Work 03 :
  - Discovery of unit tests
- Practical Work 04 :
  - Unit testing with file management
- Practical Work 05 :
  - Unit testing with Mock
- Practical Work 06 (Evaluated) :
  - All about unit tests

Deployment tools & Automation tools

Deployment tools

- Lesson 06 :
  - All that you want with Docker
- Practical Work 07
  - Run a container
- Practical Work 05
  - Build an image

Automation tools

- Lesson 07 :
  - Continuous Integration with Gitlab-ci
- Practical Work 09 :
  - My first CI

Game’s rule

- During Lessons
  - Participate
  - Be quiet

- During Practical Work
  - Use courses
  - Check your source code
  - Think before asking a question

Todo list

- Register to gitlab.com and post your login in : https://forms.gle/NsWTJuVRB25yJDDU7
- Install git
- Register to docker.com

Resources

- https://gitlab.com/hei-devops/
- denis.cauchois@yncrea.fr

Thank you for you attention !

Links :

- Sources
  - http://www.commitstrip.com/
  - https://giphy.com/