DevOps Writeup

# 1.0 Introduction

## 1.1 Lifecyclus

The lifecycle of an application:

* First we build the application
* What if the developer is done with development?
* What if the application runs in production
* What is in between, before and after?

Diagram

Description automatically generated

Flow of an application = From planning the building to planning for when the application is live

* What steps are in between?
* What has to happen during these steps

Diagram

Description automatically generated

## 1.2 Application flow

The flow of an application goes as followed:

* ~~Business requirement~~
* ~~Making of user stories~~
* ~~Creating wireframes and prototypes~~
* Development – creating new feature
* Development – Create Unit tests for new code
* Development – Install dependencies
* Ops - running test environment

QA – Responsible for tests

Ops – responsible for deploying application environment

Developer – Responsible for creating the application

Take feedback to new cycle

Wall of confused: A scenario in which development and Devops have fundamentally different thoughts

Developers wanting change while Devops want stability

Difference between functional and non-functional requirements:

* Functional requirements are:
  + Specification features
  + Prioritization of features
* Use automatic tests:
  + Automated functional tests
  + Integrated build process
* Aimed at business usage:
  + Bugs
  + evolution
* Non functional requirements are
  + Useful troubleshooting logs
  + Deployment
  + Undo-redo operations
* Non functional tests:
  + Automatic technical tests
  + Integrated build process
  + Continuous development
* Technical operation
  + performance and technical problems

Functional requirements describe what the system should do

Non functional requirements describe how the system works

# 2.0 The three ways

# 3.0 Source control

# 4.0 Flows -CI & CD concepts

# 5.0 CI in Jenkins

# 6.0 DTAP & environments on demand

# 7.0 Flows & feedback – Integrated testing

# 8.0 Flows & feedback – Monitoring and reporting

# 9.0 Integration exercise