

CI/CD pipelines

Ricardo Martins
17-05-21 Udacity project

What is CI/CD?

- CI - Continuous Integration
 - Is the act of integrate the new code we want to add into the our app
 - It relates all the steps to guaranty that our increments pass certain steps such as testing and prepare to be deployed.
- CD - Continuous Deployment
 - It creates the necessary infrastructure to integrate everything and ship to production, it can run some some tests to evaluate if a rollback is needed

Why do we need it?

- This both methods have very clear goal for the developer team and for the product it self.
- Automation is a key word that come in play.
 - Less time to spend on all this process, more time to develop features;
 - More time to ensure quality;
 - More confident we are as developers and consequently, more confidence in the product the stakeholders have.

Benefits

- As developers, this methods allow to :
 - Spend less time on solving issues from new code - **Reducing costs;**
 - Have less bugs in production - **Avoiding costs;**
 - Spend less time doing manual testing - **Avoiding costs;**
 - Automation decrees the human error - **Avoiding costs;**
 - Faster deployments - **Avoiding costs**

Benefits

Cause - Effect

- For the product and Stakeholders, this methods allow to :
 - Add more value for the product, relating more and quickly - **Increase Revenue**
 - Production with more confidence without the need of manual Checks- **Increase Revenue**
 - Reduce the downtime, result of a major bug or a crash - **Protect revenue**
 - Be able to easily undo a change, to a more stable version - **Protect revenue**