

IF1006 - Project

For IT organizations, DevOps is considered a real cultural and technical revolution. First, organizations are identifying a historical misalignment (Dev and Ops) that consume a bunch of money. So, they are changing their way to do software (culture). Second, competitors (mainly startups) are using digital platforms (eg. Cloud computing) to deliver software more fast than ever. Thus, increasing the need to be high-performing.

DevOps tools aims to help organizations in their journey to be high-performing. Therefore, from many parts of the Internet is possible to identify a bunch of tools that “can solve anything” without any concrete information about real results of that.

In fact, DevOps environments can congregate tools to help the software delivery process. Therefore, the lack of hermetic tools (those which fit with real need of environment) has lead organizations to develop their own “arsenal”. This is the case of Facebook, Google, IBM, Netflix and so forth.

In this project, we will develop our own pipeline orchestrator (eg. Jenkins) to help organizations to flow their code from the system control version until production deploy - Continuous Deployment.

So, you need to do:

- 1- Build a team up to 4 members;
- 2- Creating 4 folders to represent the environments: Development (building + unitTest), Testing, UAT (User Acceptance Testing env), and Production;
- 3- Create a script (bash, Powershell) to perform the steps presented in pipeline as shown in lesson: Pipeline. Ex. Download code, compile, unit tests, functional tests and UAT;
- 4- Deploy your code into google cloud platform.
- 5- Deploy your script in another machine and run it again.

Ps. Create a Docker image and push it to docker hub before promote your code to Testing Env.

Regards,
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