DEVOPS

Switch - Curso de Especialização em Desenvolvimento de Software

Class Assignment 2

CA3, Part 1 - Virtualization with Vagrant

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CA3: Overview

Attention: This class assignment has two parts!

This document only describes Part 1.
Part 2 will be available soon and regards using Vagrant.

- **Topic of this assignment**: Virtualization with Vagrant
- **Start Date:** 21, April
- **End Date:** 6, May (no commits after this date!)
- **Development Repository:** Your individual repository (that you have created for DevOps)
- **CA Review/Presentation:**
  - Lab Class on 6 May
  - Each student is **required to do only 1 presentation during the term**. See the last slide for further instructions.

CA3, Part 1: Operative Guidelines

- You should use your own private repository (i.e., the repository you created in the first week, e.g., devops-20-21-1122345)
- You should create issue(s) in Bitbucket for your main tasks
- **You should create a folder for each part of the class assignment** in your repository where you should add the files specific to the assignment (e.g., the readme.md file with the technical report of this assignment)
  - A simple technical report should be provided **only in the readme.md file related to the assignment!**
  - You are not required to produce further documentation (e.g., slides), even if you are selected to do the presentation for the class assignment! The readme.md file should be sufficient.
- **Teachers expect several commits!**

CA3, Part 1: Goals/Requirements

The goal of the Part 1 of this assignment is to practice with VirtualBox using the same projects from the previous assignments but now inside a VirtualBox VM with Ubuntu

1. You should start by creating your VM as described in the lecture
2. You should clone your individual repository inside the VM
3. You should try to build and execute the spring boot tutorial basic project and the gradle_basic_demo project (from the previous assignments)
   - **Attention:** Do not forget to install the dependencies of the projects (e.g., git, jdk, maven, gradle, etc.)
   - **Attention:** Also, some goals of gradle_basic_demo may not execute in the VM because it does not have a Desktop (remember that we are using the ubuntu **server**)!
   - **You should report and explain possible issues you may encounter in your readme file!**
4. For web projects you should access the web applications from the browser in your host machine (i.e., the "real" machine)
5. For projects such as as the simple chat application you should execute the server inside the VM and the clients in your host machine. **Why is this required?**
6. Describe the process in the readme file for this assignment.
   - **Attention: Do not commit the VM to your repository!** For this part of the assignment it is only required to commit the technical documentation in the readme file.
7. At the end of the part 1 of this assignment mark your repository with the tag **ca3-part1**.

CA3, Part 1: Technical Report

You should produce a technical report documenting Part 1 of the assignment.

- The technical report **must be produced** in the **readme.md** file located in the repository folder related to Part1 of CA3 (e.g., /ca3/part1/)
- You should use the markdown syntax in the readme.md file.[1]
- The report should include:
  - A section dedicated to the description of the implementation of the requirements
    - Should follow a "tutorial" style (i.e., it should be possible to reproduce the assignment by following the instructions in the tutorial).
    - Should include a description of the steps used to achieve the requirements.
    - Should include justifications for the options (when required)

[1] See `https://en.wikipedia.org/wiki/Markdown`

CA3, Part2...

Attention: This class assignment has two parts!

This document only describes Part 1.
Part 2 will be available soon and regards using Vagrant for managing VMs.