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RECORDPOINT
Information intelligence

RecordPoint Tech Task

We would like you to demonstrate the automation of the spin-up and installation of a single-machine n-tier architecture. It is up to your interpretation which layers you would like to introduce, provided they can all be automatically started from a single command and serve some basic data. We require you to make a selection of technical choices you're most comfortable with, whether it be Linux vs. Windows or Java vs. Ruby. Choose the platforms, frameworks and languages you're most familiar with.

Requirements
High-level: Using automation we want to spin up an environment which will allow us to connect to a web server on port 80 or 8080 and serve a bit of simple HTML content from a data storage source. You will be required to write a small application in the language/framework of your choice to connect to the database, query it, and return the result to the user.

Criteria
Developed within a git repository with frequent commits:

- Automated way to spin up/down single machine environment (vagrant, docker compose, minikube etc)
- OS installation/configuration (Windows or Linux, any versions)
- Configuration management (Chef/Puppet/Ansible, Dockerfile or kube deployment files) to install and configure applications
- Installation of a web tier and data tier (your choice, e.g. NGINX/Apache/IIS, MySQL/PostgreSQL/Redis/etc)
- Running a simple web application to query and return data

Process
Please establish a git repository from the beginning and demonstrate frequent commits. We would like to be able to spin up the environment using a single command (eg. `vagrant up` or `docker-compose up` or `kubectl apply -f ...`. We should only have to then connect to the instances IP address with a browser to see the resulting data returned. Finally, we recommend you spend a maximum of 3 hours on this activity, however you may spend longer if you wish. We would like to see your progress throughout that time period as the stack is developed.