Vagrant is used for creating, running, and managing virtual machines and uses technologies such as VMware, Virtualbox, and Hyper-V. Vagrant allows you easily maintain portable virtual environments, and automates the configuration of virtual environments using Puppet, Chef, Ansible, etc., depending on your host OS. Docker on the other hand utilizes containerization which allows applications to be packaged inside lightweight containers, and run inside a virtual machine. Choosing whether to use Vagrant or Docker will depend on individuals use-case, such as if they are seeking to rapidly and deploy new virtual environments, or if they would like to run applications as lightweight containers in an already existing and configured virtual environment.

I recently got exposed to both of these technologies, thanks to this course. I personally prefer having multiple VM’s with each dedicated to a specific business/mission function. I do not like running multiple containers on a single virtual machine since it seems it can become a single point of failure if a server goes down. Therefore Vagrant seems like a better option for me to pursue since I can add multiple Vagrant “Boxes” which are essentially differently VM’s, and assign each one of them to perform a particular service. I can also utilize the Vagrant tool to automatically build and effectively manage all of these VMs remotely, which makes virtualization a lot easier.