# **Devops Toolkit**

**Objective:** Provide a basis to learn and explore concepts used in industry today. Familiarize students with virtual machines(VMs), command line interface(CLI), and Continuous Intigration/Continuous Development(CI/CD) pipelines.

* **Installing Utilities**
  + Download VirtualBox. This application will hold the virtual machine that you create for your projects.
    - <https://www.virtualbox.org/wiki/Downloads>   
      Choose the correct distribution for your set up.
  + Download Vagrant. We will use this tool to automate the production and tear down of virtual machines.
    - <https://www.vagrantup.com/downloads.html>   
      Choose the correct distribution for your set up.
* **Creating the VM**
  + Vagrant greatly simplifies this step. A vagrantfile will be provided to you, place it into a directory and open your command prompt there. On windows shift+right-click will give you the option.
  + If using windows run the command

$ vagrant plugin install vagrant-guest\_ansible

* + In the command prompt, enter "vagrant up" to initiate the start-up of your VM
  + Once the set-up is complete you can pull up virtual box and you will see there is a VM running on your machineChoose the correct distribution for your set up.
* **Using the VM**
* **Destroying the VM**
  + To remove the VM from your machine simply enter the command "vagrant destroy" into the command prompt on your host computer.

For more information on utilities:

* VirtualBox: <https://www.virtualbox.org/wiki/User_FAQ>
* Vagrant: <https://docs-v1.vagrantup.com/v1/docs/getting-started/>
* Docker: <https://docs.docker.com/engine/faq/>
* Travis CI: <https://docs.travis-ci.com/user/getting-started/>