Pre-class setup

Task 1: Install Git software.

Note: if you have git, installed you can skip this.

Download git from the following.

- Windows - https://git-scm.com/download/win
- OSX - https://git-scm.com/download/mac

While downloading make sure you are downloading the **latest** version

After installation, you can verify your installation by the running command in your CMD (command prompt) / Terminal

```
git --version
```

Tips for Installation:
While installing git in windows, you can select the default options in all screens.

Task 2: Setup an Account in **DigitalOcean**

The Kubernetes cluster, workshops and demos for this course will be conducted on DigitalOcean (DO), a public cloud provider. Please use the following code to sign up to get a $200 free credit which will be sufficient for these 4 days course.

https://m.do.co/c/ab5739ca3ae2

You may use other cloud providers that provide managed Kubernetes service. You will also have to manage non DO environment yourself, including troubleshooting any issues that arise.

When you signup to DO, you will ask you to provide debit/credit card details for verification. You will not be charged for using the services if your spending is within the first $200. If DO reject your credit card, here are some remedial actions you can try:

- Enable overseas transaction for your credit card when you add your card to DO. Once your card has been accepted, disable overseas transactions.
- Your bank thinks that it is a fraudulent transaction. Check with the bank that issued the card

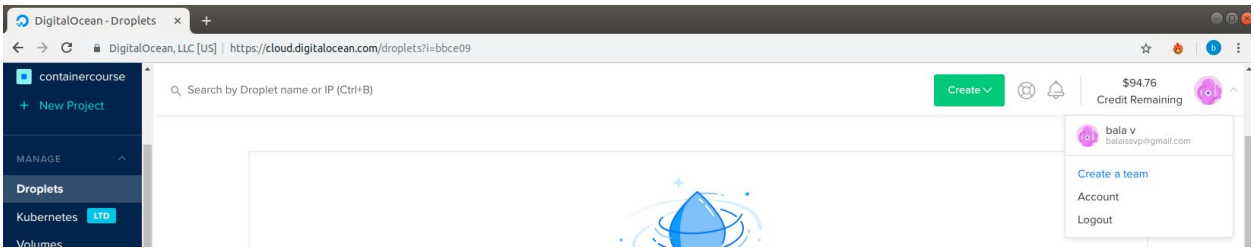
IMPORTANT: Please set up your DO account or any other public cloud provider before the start of the class.

If you are using DO, the instructor will show you how to delete the account at the end of the class if you decide not to continue using it.

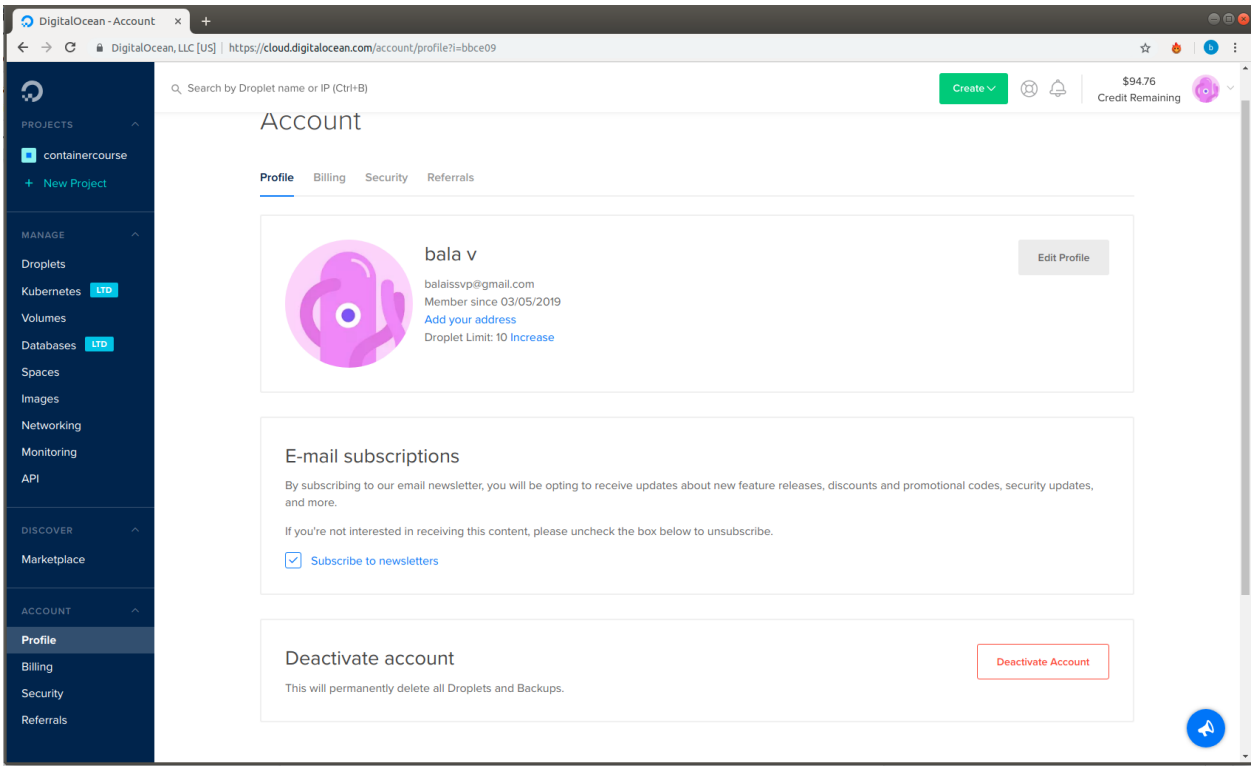
UnRegister DigitalOcean:

Please use the following steps to deactive/delete your DO account:

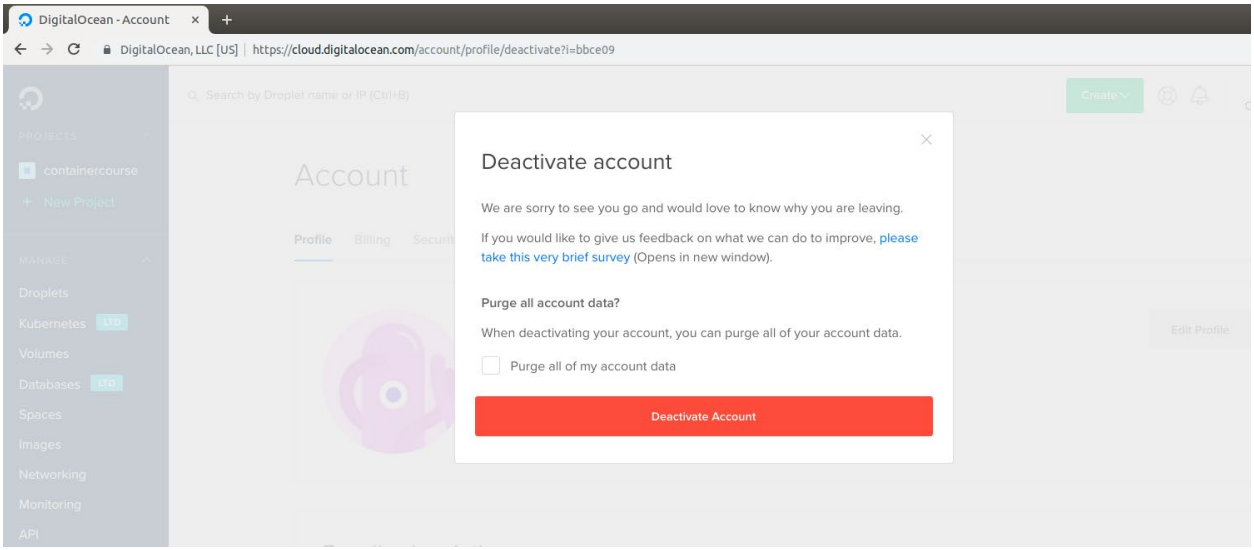
- Login to your DO Account
- Click on the top right corner (Profile icon) and the following dropdown in will appear
- Click on Account



- Click on **Deactivate Account** button



- Deactivate Account popup will appear.
- You can select the checkbox “Purge all of my account data”, to remove account info like email, credit card, etc..
- Click on **Deactivate Account** button



Now you have successfully deactivated your DO account.

Task 3: Installing Docker on Windows and OSX

For Windows

Installing Docker is a straight forward process. Do note that you need to have a 'modern' Windows OS. The recommended Windows OS is Windows 10

The following link provides a very detailed installation
https://docs.docker.com/docker-for-windows/install/

If your Windows OS do not meet the requirements for Docker Desktop, you may want to install Docker Toolbox on Window.
https://docs.docker.com/toolbox/toolbox_install_windows/

For OSX

The Docker site has a very detailed installation instruction. See
https://docs.docker.com/docker-for-mac/install/

After installing Docker, open a terminal/command prompt, and type the following

```
docker --version
```

Docker should display its version number.

Go to Docker Hub and create an account
https://hub.docker.com/
This will be your image repository

Task 4: Install kubectl and helm

The following are additional tools required for the course

- `kubectl` - `kubectl` is the Kubernetes command line tools used to manage Kubernetes. It consists of just a single binary. Use the following link to download the appropriate binary for your operating system
  https://kubernetes.io/docs/tasks/tools/
- `helm` - helm is a package manager for Kubernetes. The latest version is v3 which consist of a single binary. Download and install the appropriate binary for your operating system
  https://github.com/helm/helm/releases
  Download the v3.x version

Once you have downloaded and extracted the above 2 binaries (`kubectl` and `helm`), install them according to the following instructions

For Windows

For Windows create a directory called bin either in `c:\bin` or in your home directory (eg. `c:\Users\<your login>\bin`)

Add the above folder to your `PATH` variable. See https://www.architectryan.com/2018/03/17/add-to-the-path-on-windows-10/ for instructions

For OSX

For OSX, copy the 3 binaries to `/usr/local/bin` directory. You will need root access to perform this operation.

Task 5: Installing Visual Studio Code

You can use and IDE or editor that is capable of editing YAML file. In this course, the instructors will be using Visual Studio Code. If you like to use Visual Studio Code, please download and install from here

https://code.visualstudio.com/download

For Windows, please install either User or System Installer.