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**

Even though you can use laptop with Windows / Mac for the class. Most of the concepts we learn (like building containers, deploying to cluster) will require you to use some cloud services like Digital Ocean. Students have to setup an account during the class.

*Digital ocean will ask you to provide debit/credit card details for payment. Students won't be charged for using the services which we use in class. (Because when you register you will get $100 Free Credits, which will be more than enough for the 4 days class)

At the end of the class, we will teach you how to avoid other charges or stop the services that we may use in class.

$100 free Credits will be sufficient for 4 days of the course.

To Register:

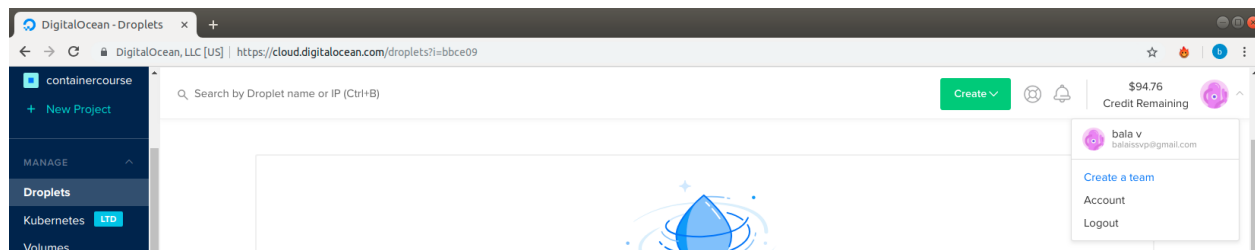Use the following link to signup

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

to get $100 free credits
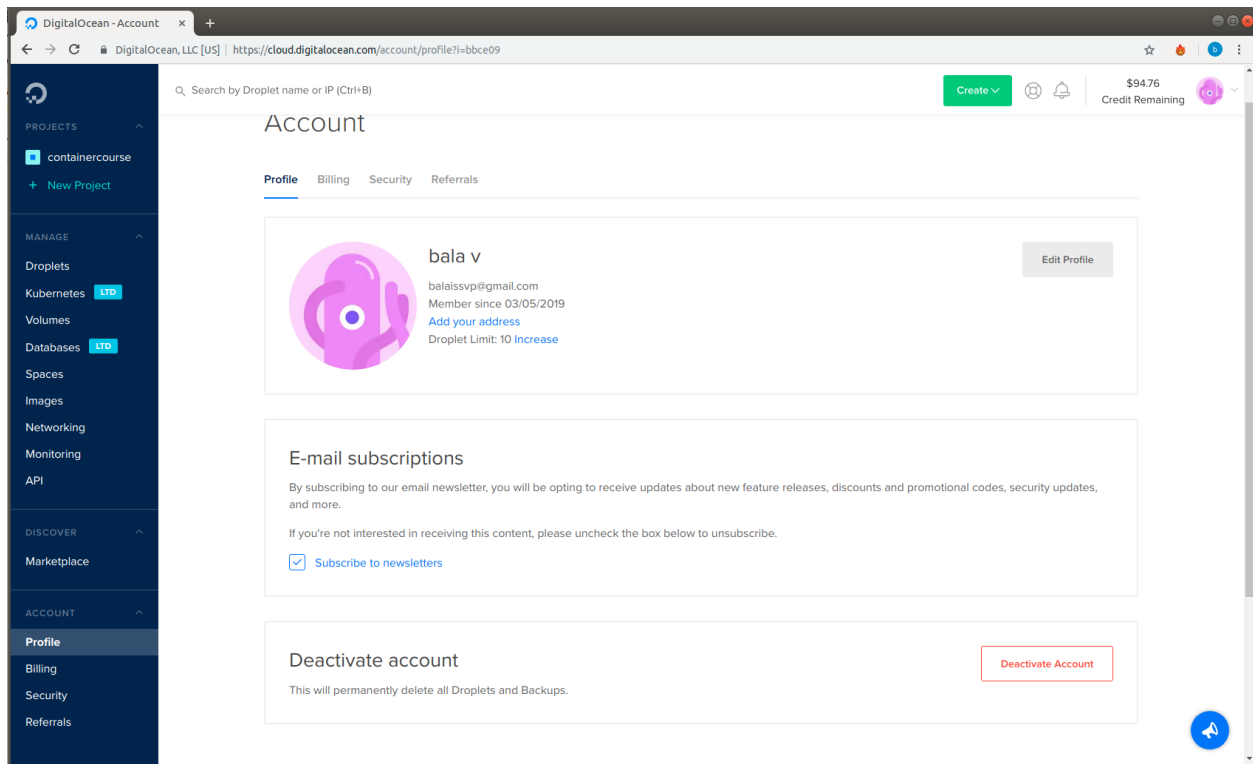
To UnRegister / Stop using DigitalOcean:

Please don't forget to close / deactivate your account. Else, **you may incur recurrencing charges** from digitalocean once 100$ credit is finished.
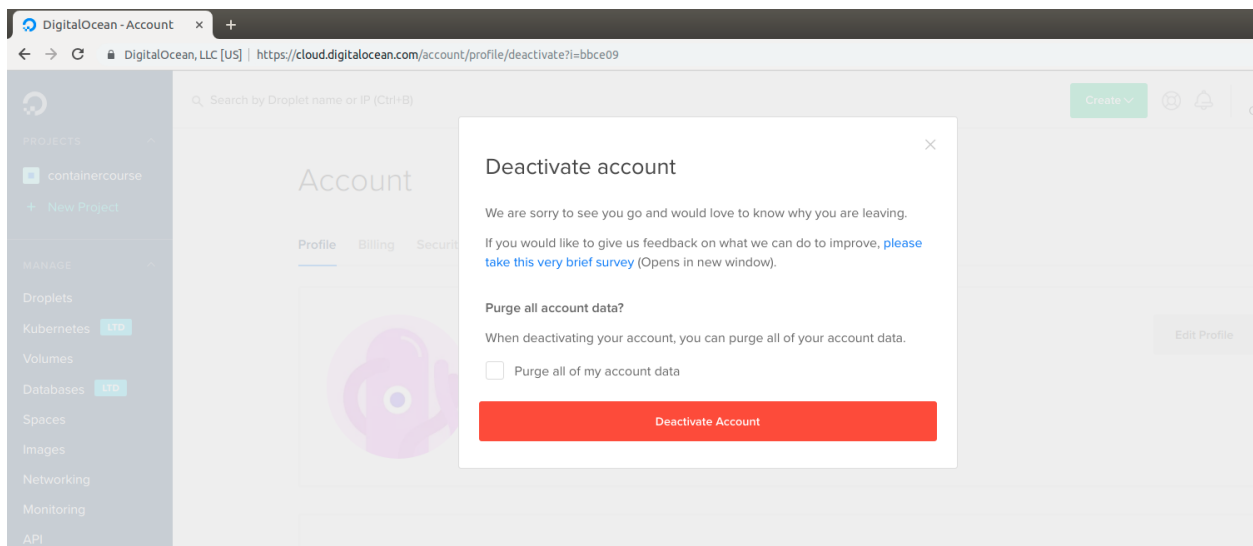Please find the steps to deactivate DigitalOcean account below,

- Login to your DigitalOcean 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 DigitalOcean 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 the 64bit either User or System Installer.