Create EC2 account on AWS:

* Go to Amazon Web Services
* Create account
* Click “Launch Instance” box
* Step 1: Choose an Amazon Machine Image (AMI) - select Ubuntu Server 16.04LTS
* Step 2: Choose an Instance Type - select t2.micro – default option
* Step 3: Configure Instance Details – click next to “Add storage”
* Step 4: Add Storage – change from 8 to 30 (max for free tier eligible)
* Step 5: Add Tags – leave as is, skip next to “Configure Security Group”
* Step 6: Configure Security Group – SSH 22, HTTP 80

Install Docker

* Launch Instance
* Scroll below and grab public IP address
* Cut and paste into Bash using command ssh Ubuntu@[IP address from Instance]
* Type command curl –ssl <https://get.docker.com> | sh
* Sudo usermod –aG docker ubuntu
* Type ctrl D or exit to restart
* Type docker pull jupyter/datascience-notebook
* Type docker images
* Type docker pull postgres
* Type docker tag jupyter/datascience-notebook dsnb
* Type docker images
* Type docker pull –v /home/ubuntu/home/jovyan –p 8888:8888 –d dsnb

To show running objects and find token or key

* Type docker ps
* Type docker exec [1st 4 letters of key] jupyter notebook list

To link to port and run docker image as a container

* Type docker run –v home/Ubuntu:/home jovyan –p 80:8888 –d dsnb

DOCKER

JUPYTER

AWS SERVER

SHELL

SHELL

CONTAINER

**General Purpose - Current Generation (from Amazon Web Services)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **vCPU** | **ECU** | **Memory (GiB)** | **Instance Storage (GB)** | **Linux/UNIX Usage** | **Hours in 3 mos** | **TOTAL FOR 3 MONTHS** |
| t2.nano | 1 | Variable | .5 | EBS Only | $0.0058 per Hour | 2160 | $12.53 |
| t2.micro | 1 | Variable | 1 | EBS Only | $0.0116 per Hour | 2160 | $25.06 |
| t2.small | 1 | Variable | 2 | EBS Only | $0.023 per Hour | 2160 | $49.68 |
| t2.medium | 2 | Variable | 4 | EBS Only | $0.0464 per Hour | 2160 | $100.22 |

Assume all months have 30 days