

# New Application (Python + React) in fresh EC2

1. Created new EC2
2. Updated ubuntu packages
  - 2.1. **sudo apt-get update** [ refreshes available packages & their versions in ubuntu]
  - 2.2. **sudo apt-get upgrade** [ upgrades all installed packages to their latest versions]
3. Install Docker
  - 3.1. these packages allow apt to use repositories over HTTPS & manage keys [ single command ]  
**sudo apt-get install \**  
**apt-transport-https \**  
**ca-certificates \**  
**curl \**  
**gnupg \**  
**lsb-release -y**
  - 3.2. **curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg** [ Dockers official GPG key to verify package authenticity ]
  - 3.3. Dockers repository to apt sources  
**echo \**  
**"deb [arch=\$(dpkg --print-architecture)**  
**signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] \**  
**https://download.docker.com/linux/ubuntu \**  
**\$(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null**
  - 3.4. **sudo apt-get update**
  - 3.5. **sudo apt-get install docker-ce docker-ce-cli containerd.io -y** [ Installs Docker engine & related components ]
4. Install Docker Compose
  - 4.1. Download Docker compose Library  
**sudo curl -L**  
**"https://github.com/docker/compose/releases/download/\$(curl -s https://api.github.com/repos/docker/compose/releases/latest | grep -Po '"tag\_name": "\K.\*\d")"**  
**-o /usr/local/bin/docker-compose**
  - 4.2. **sudo chmod +x /usr/local/bin/docker-compose** [ make docker compose binary executable ]
  - 4.3. **sudo docker-compose --version** [ to verify docker compose installation ]
5. Deploying docker compose application
  - 5.1. **mkdir I-VentureBot-react**
  - 5.2. **cd I-VentureBot-react**

- 5.3. **git clone https://github.com/amaze18/I-VentureBot/tree/react** [ cloned git repo, so this repo is cloned into culturevo folder? ]
- 5.4. **cd I-VentureBot-react** [ change to app directory where .yml is present ex : clone abovegit repo to culturevo folder then **cd I-VentureBot-react** ]
- 5.5. **docker-compose up -d --build** [ build images and starts docker contaier in detached mode { -d running in backgorund } ]
- 5.6. **docker ps** [ to list all running docker containers ]

#### USEFUL DOCKER COMMANDS :

- A. **docker-compose down** [ stops and remove containers, networks, images ,etcc ]
  - B. **docker-compose up -d** [ to create and start containers in background ]
- **build** is used to create/build docker images based on instructions in Dockerfile
  - **up** is used to start containers based on existing built docker images

<https://github.com/amaze18/I-VentureBot/blob/react/docker-compose.yml>  
<https://github.com/amaze18/I-VentureBot/blob/react/chatbot-frontend/Dockerfile>  
<https://github.com/amaze18/I-VentureBot/blob/react/chatbot-backend/Dockerfile>

C.

END