Steps:

- 1. Create ec2 instance
 - a. Create default ec-2 instance with aws linux server
 - b. Save .pem file (for ssh)
 - c. This .pem will be required while login from local computer
 - d. Once ec2 instance created, a default user ec2-user will auto get created
 - e. Login using local:
 - i. ssh -i Downloads/ec2_key_pair.pem ec2-user@98.81.204.98
 - f. Create a user and password
 - i. sudo adduser dev-1
 - ii. sudo passwd dev-1
 - g. Set user their ssh key in ec2 so that to login safely
 - i. sudo mkdir -p /home/dev-1/.ssh
 - ii. sudo cp ~/.ssh/authorized_keys /home/dev-1/.ssh/
 - h. Assign user their roles and permissions
 - i. sudo chown -R dev-1:dev-1 /home/dev-1/.ssh
 - ii. sudo chmod 700 /home/dev-1/.ssh
 - iii. sudo chmod 600 /home/dev-1/.ssh/authorized_keys
 - i. Grant sudo privileges to dev-1
 - i. sudo visudo
 - ii. dev-1 ALL=(ALL) NOPASSWD:ALL (this will set dev-1 to use sudo command, some alternatives options are also there)
 - j. Login with new user dev-1
 - i. ssh dev-1@98.81.204.98
 - k. Install dependencies
 - i. sudo dnf update -y
 - ii. sudo dnf install -y gcc make wget curl tar git sqlite-devel bzip2-devel openssl-devel libffi-devel
 - I. (Optional) Install python other version (3.10) because pre-installed was 3.9
 - i. cd ~
 - ii. wget https://www.python.org/ftp/python/3.10.13/Python-3.10.13.tgz tar xvf Python-3.10.13.tgz
 - iii. cd Python-3.10.13
 - iv. ./configure --enable-optimizations
 - v. make -j\$(nproc)
 - vi. sudo make altinstall
 - m. Install virtual env
 - i. python3.10 -m venv myenv
 - ii. source ~/myenv/bin/activate

- n. Clone github directory
 - i. Git clone https:repolink>
- o. Install required packages
 - i. pip install --upgrade pip
 - ii. pip install -r requirements.txt
- p. Run the main or backend api file
 - i. Python3 <u>run.py</u>

Finally: Access over the internet

- 1. Make sure your API is hosted on 0.0.0.0
- 2. Open the port in the EC2 Security Group
- Go to AWS EC2 Console
- Select your instance
- Find the Security Group
- Click Edit inbound rules
- Add rule:
 - o Type: Custom TCP
 - o Port Range: 8000 (or whatever you're using)
 - Source: 0.0.0.0/0 (or your IP only for security)
- 3. Finally check the public IP with port in chrome it will run