Steps to Deploy a Model on AWS EC2:

1. **Create an AWS account as the root user.**
2. **Enter your personal and card details.**
3. **After account creation, go to the EC2 dashboard.**
4. **Select "EC2" from the AWS services.**
5. **Click on "Launch Instance".**
6. **In the network settings, set the inbound rule to allow "All Traffic" (not recommended for production).**
7. **After launching the instance, click on the instance ID.**
8. **Select the instance and click "Connect".**
9. **Create a key pair (for security) and download the .pem file.**
10. **Save the .pem file in your deployment directory.**
11. **Open Command Prompt (CMD) in the folder where the .pem file is saved.**
12. **Install the necessary packages: python3, unzip, and update the system.**

    sudo apt update

    sudo apt install python3

    sudo apt install unzip

13. **In AWS, under the SSH client tab, copy the SSH connection command. Example:**

ssh -i "sai2003.pem" ubuntu@ec2-51-20-132-230.eu-north1.compute.amazonaws.com

14. **Paste it into CMD and press Enter.**
15. **Type yes when prompted to confirm the connection.**
16. **You will now be connected to the instance.**
17. **Open another CMD window in the same directory.**
18. **To upload files, use the SFTP command (note the correction):**

sftp -i "sai2003.pem" ubuntu@ec2-51-20-132-230.eu-north1.compute.amazonaws.com

19. **Upload your deployment zip file. The zip file should contain:**
    - main.py
    - saved_model.pkl

- templates/
- requirements.txt

20. **Once connected, upload the file using:**

    put deployment.zip

21. **Unzip the deployment folder:**

    unzip deployment.zip

22. **List the files to confirm extraction:**

    ls

23. **Navigate into the deployment directory:**

    cd deployment

24. **Install required Python packages:**

    pip install -r requirements.txt

    If errors occur, try:

    pip install -r requirements.txt --break-system-packages

25. **In main.py, make sure the following line is present to run on port 7080:**

    app.run(host="0.0.0.0", port=7080)

26. **Run your application:**

    python3 main.py

Notes:

- **To edit any file on the server:**

  vi <filename>

  - Press i to enter **INSERT** mode.
  - After editing, press Esc, then type :wq to save and exit.

Once your Flask app is running with:

python3 main.py

And it's bound to:

app.run(host="0.0.0.0", port=7080) [**main.py should contain this**]

You can access your site using your EC2 instance’s **public IP address** and the **port number** in your browser:

http://<your-ec2-public-ip>:7080

Example: If your instance's public IP is 51.20.132.230, go to:

http://51.20.132.230:7080