

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 "aws_deployment.pem" ubuntu@ec2-13-61-183-155.eu-north-1.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 "aws_deployment.pem" ubuntu@ec2-13-61-183-155.eu-north-1.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
```