Steps to Deploy a Django Website on AWS EC2

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1. Launch an EC2 Instance

1. **Login to AWS Console**: Go to the AWS EC2 Dashboard.
2. **Launch an Instance**: Choose an Ubuntu AMI (e.g., Ubuntu 22.04 LTS).
3. **Instance Type**: Select an appropriate type (e.g., `t2.micro` for free tier).
4. **Key Pair**: Create or select an existing key pair for SSH access.
5. **Security Group**:
   - Allow **port 22** for SSH.
   - Allow **port 8000** for Django's development server.

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2. SSH Into the Instance

Open your terminal and connect:
bash
Copy code

```
ssh -i "your-key.pem" ubuntu@your-ec2-public-ip
```

1.

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3. Install Required Packages

Run the following commands:

bash
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```
sudo apt update
sudo apt upgrade -y
sudo apt install python3-pip python3-venv -y
```

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4. Set Up Your Django Project

1.

Set up a virtual environment:
bash

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```
python3 -m venv venv
source venv/bin/activate
```

2.

Import project from github:
```
git clone <repo>
```

Install all modules from requirements.txt:
```
pip install -r requirements.txt
```

3.

Allow public access by editing `myproject/settings.py`:
python
Copy code
```
ALLOWED_HOSTS = ['your-ec2-public-ip']
```

4.

Run migrations:
bash
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```
python manage.py migrate
```

5.

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5. Run the Django Development Server

Start the server:
bash
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```
python manage.py runserver 0.0.0.0:8000
```

1.
2. Access the project in your browser at:
   vbnet
   Copy code
   ```
   http://your-ec2-public-ip:8000
   ```

Use `authbind` for Binding to Privileged Ports (Secure Option)

You can configure `authbind` to allow non-root users to bind to privileged ports:

Install `authbind`:
bash
Copy code
```
sudo apt-get install authbind
```

1.

Enable your user to bind to port `80`:
bash
Copy code
```
sudo touch /etc/authbind/byport/80
sudo chmod 500 /etc/authbind/byport/80
sudo chown $USER /etc/authbind/byport/80
```

2.

Run your server with `authbind`:
bash
Copy code
```
authbind --deep python manage.py runserver 0.0.0.0:80
```