**You said:**

create a angular simple appn and then we push code on github after this start deploying appn on aws ec2 - step by step from scratch please - let's start - please step by step from scratch - just a simple angular simple appn

**ChatGPT said:**

Let's start step by step from scratch. We'll create a simple Angular application, push the code to GitHub, and then deploy it on AWS EC2.

**Step 1: Set Up Angular Application**

1. **Install Node.js and Angular CLI** (Skip if already installed)
   * Download and install [Node.js](https://nodejs.org/)
   * Install Angular CLI globally:

sh

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npm install -g @angular/cli

* + Verify installation:

sh

CopyEdit

node -v

npm -v

ng version

1. **Create a New Angular App**

sh

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ng new angular-app

cd angular-app

1. **Run the App Locally**

sh

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ng serve --open

* + The app should be running at http://localhost:4200/

**Step 2: Push Code to GitHub**

1. **Initialize Git Repository**

sh

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git init

git add .

git commit -m "Initial commit"

1. **Create a GitHub Repository**
   * Go to [GitHub](https://github.com) and create a new repository (e.g., angular-app).
2. **Push Code to GitHub**

sh

CopyEdit

git remote add origin https://github.com/your-username/angular-app.git

git branch -M main

git push -u origin main

**Step 3: Set Up AWS EC2 Instance**

1. **Launch EC2 Instance**
   * Go to [AWS Console](https://aws.amazon.com/console/)
   * Navigate to **EC2 > Instances > Launch Instance**
   * Choose **Ubuntu** as the OS.
   * Select an instance type (t2.micro is free-tier eligible).
   * Configure security groups:
     + Allow **HTTP (80), HTTPS (443), and SSH (22)**
   * Launch the instance and download the .pem key file.
2. **Connect to EC2**

sh

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chmod 400 your-key.pem

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

**Step 4: Install Dependencies on EC2**

1. **Update Packages**

sh

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sudo apt update && sudo apt upgrade -y

1. **Install Node.js & npm**

sh

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curl -fsSL https://deb.nodesource.com/setup\_18.x | sudo -E bash -

sudo apt install -y nodejs

node -v

npm -v

1. **Install Angular CLI**

sh

CopyEdit

sudo npm install -g @angular/cli

1. **Clone GitHub Repository**

sh

CopyEdit

git clone https://github.com/your-username/angular-app.git

cd angular-app

1. **Install Project Dependencies**

sh

CopyEdit

npm install

**Step 5: Build and Serve Angular App**

1. **Build the App**

sh

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ng build --prod

* + This generates files in the dist/angular-app directory.

1. **Install and Configure Nginx**

sh

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sudo apt install nginx -y

sudo systemctl start nginx

sudo systemctl enable nginx

1. **Configure Nginx to Serve Angular App**

sh

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sudo nano /etc/nginx/sites-available/angular

* + Add the following configuration:

nginx

CopyEdit

server {

listen 80;

server\_name your-ec2-public-ip;

root /home/ubuntu/angular-app/dist/angular-app;

index index.html;

location / {

try\_files $uri /index.html;

}

}

1. **Enable Configuration & Restart Nginx**

sh

CopyEdit

sudo ln -s /etc/nginx/sites-available/angular /etc/nginx/sites-enabled/

sudo nginx -t

sudo systemctl restart nginx

**Step 6: Access Deployed App**

* Visit http://your-ec2-public-ip/ in the browser.

✅ **Done!** Your Angular app is now deployed on AWS EC2. 🎉 Let me know if you need any modifications or explanations. 🚀

4o

**You said:**

https://github.com/deepanshu1334/angular-app.git

**ChatGPT said:**

Great! Since you've already pushed your Angular app to GitHub at [**deepanshu1334/angular-app**](https://github.com/deepanshu1334/angular-app.git), let's proceed with deploying it on AWS EC2 step by step.

**🔹 Step 1: Launch an EC2 Instance**

1. **Go to AWS Console → EC2 → Instances → Launch Instance**
2. **Choose Ubuntu** as the OS (Ubuntu 22.04 LTS recommended).
3. **Instance Type:** Select t2.micro (Free Tier eligible).
4. **Security Group Configuration:**
   * Allow **SSH (22)** → Your IP
   * Allow **HTTP (80)** → Anywhere
   * Allow **HTTPS (443)** → Anywhere
5. **Launch and Download the .pem Key File.**

**🔹 Step 2: Connect to EC2 Instance**

Once the instance is running, connect via SSH:

sh

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chmod 400 deepanshu.pem

ssh -i deepanshu.pem ubuntu@your-ec2-public-ip

**🔹 Step 3: Install Dependencies on EC2**

**1️⃣ Update Packages**

sh

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sudo apt update && sudo apt upgrade -y

**2️⃣ Install Node.js & npm**

sh

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curl -fsSL https://deb.nodesource.com/setup\_18.x | sudo -E bash -

sudo apt install -y nodejs

node -v

npm -v

**3️⃣ Install Angular CLI**

sh

CopyEdit

sudo npm install -g @angular/cli

**🔹 Step 4: Clone Your GitHub Repository**

sh

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git clone https://github.com/deepanshu1334/angular-app.git

cd angular-app

npm install

**🔹 Step 5: Build the Angular App**

sh

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ng build --configuration=production

* The built files will be in dist/angular-app.

**🔹 Step 6: Install and Configure Nginx**

**1️⃣ Install Nginx**

sh

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sudo apt install nginx -y

sudo systemctl start nginx

sudo systemctl enable nginx

**2️⃣ Configure Nginx to Serve Angular App**

sh

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sudo nano /etc/nginx/sites-available/angular

* Add the following configuration:

nginx

CopyEdit

server {

listen 80;

server\_name your-ec2-public-ip;

root /home/ubuntu/angular-app/dist/angular-app;

index index.html;

location / {

try\_files $uri /index.html;

}

}

**3️⃣ Enable Configuration & Restart Nginx**

sh

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sudo ln -s /etc/nginx/sites-available/angular /etc/nginx/sites-enabled/

sudo nginx -t

sudo systemctl restart nginx

**🔹 Step 7: Access Your Angular App**

Now, open your browser and visit:

arduino

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http://your-ec2-public-ip/

✅ Your Angular app is now **LIVE on AWS EC2**! 🎉 Let me know if you need any troubleshooting or further improvements. 🚀

4o

**You said:**

deploy directly not used with nginx please - i want to keep it simple for now

**ChatGPT said:**

Got it! Let's keep it simple and deploy your Angular app directly on EC2 without using Nginx. Instead, we'll use **Angular's built-in development server** to serve the app.

**🔹 Step 1: Launch and Connect to EC2**

1. **Launch an EC2 instance** (Ubuntu 22.04 LTS recommended).
2. **Open Ports in Security Group:**
   * **SSH (22)** → Your IP
   * **Custom TCP Rule** → Port **4200** (Anywhere)  
     *(Since Angular serves the app on port 4200 by default)*
3. **Connect to EC2 via SSH:**

sh

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chmod 400 deepanshu.pem

ssh -i deepanshu.pem ubuntu@your-ec2-public-ip

**🔹 Step 2: Install Node.js and Angular CLI**

**1️⃣ Update and Install Node.js**

sh

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sudo apt update && sudo apt upgrade -y

curl -fsSL https://deb.nodesource.com/setup\_18.x | sudo -E bash -

sudo apt install -y nodejs

node -v

npm -v

**2️⃣ Install Angular CLI**

sh

CopyEdit

sudo npm install -g @angular/cli

**🔹 Step 3: Clone Your GitHub Repository**

sh

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git clone https://github.com/deepanshu1334/angular-app.git

cd angular-app

npm install

**🔹 Step 4: Start the Angular App**

Run the Angular app and allow external access:

sh

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ng serve --host 0.0.0.0 --port 4200

* --host 0.0.0.0 allows external access from any IP.
* --port 4200 specifies the port.

**🔹 Step 5: Access Your App**

Now, open your browser and visit:

arduino

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http://your-ec2-public-ip:4200/

🚀 **Done! Your Angular app is now running on AWS EC2.**  
Let me know if you need improvements or automation using **PM2** to keep it running in the background! 🎉

4o

**You said:**

ubuntu@ip-172-31-6-86:~/angular-app$ ng serve --host 0.0.0.0 --port 4200 Would you like to enable autocompletion? This will set up your terminal so pressing TAB while typing Angular CLI commands will show possible options and autocomplete arguments. (Enabling autocompletion will modify configuration files in your home directory.) No Ok, you won't be prompted again. Should you change your mind, the following command will set up autocompletion for you: ng completion Would you like to share pseudonymous usage data about this project with the Angular Team at Google under Google's Privacy Policy at https://policies.google.com/privacy. For more details and how to change this setting, see https://angular.dev/cli/analytics. No Global setting: not set Local setting: disabled Effective status: disabled Warning: This is a simple server for use in testing or debugging Angular applications locally. It hasn't been reviewed for security issues. Binding this server to an open connection can result in compromising your application or computer. Using a different host than the one passed to the "--host" flag might result in websocket connection issues. You might need to use "--disable-host-check" if that's the case. Component HMR has been enabled. If you encounter application reload issues, you can manually reload the page to bypass HMR and/or disable this feature with the --no-hmr command line option. Please consider reporting any issues you encounter here: https://github.com/angular/angular-cli/issues Initial chunk files | Names | Raw size polyfills.js | polyfills | 90.20 kB | main.js | main | 23.11 kB | styles.css | styles | 95 bytes | | Initial total | 113.40 kB Application bundle generation complete. [4.153 seconds] Watch mode enabled. Watching for file changes... NOTE: Raw file sizes do not reflect development server per-request transformations. ➜ Local: http://localhost:4200/ ➜ Network: http://172.31.6.86:4200/ ➜ press h + enter to show help

**ChatGPT said:**

Your Angular app is running on EC2 successfully! 🚀

Now, to access it from your browser, use:

cpp

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http://<your-ec2-public-ip>:4200/

*(Replace <your-ec2-public-ip> with your actual public IP.)*

**🔹 Next Steps**

Since ng serve runs in the foreground, if you close the SSH session, the app will stop. To keep it running:

**1️⃣ Run Angular in the Background using tmux**

sh

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sudo apt install tmux -y

tmux new -s angular-session

ng serve --host 0.0.0.0 --port 4200

* Press Ctrl + B, then D to detach.
* To reattach the session:

sh

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tmux attach -t angular-session

**2️⃣ Use nohup (Alternative to tmux)**

sh

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nohup ng serve --host 0.0.0.0 --port 4200 > output.log 2>&1 &

* This runs the server in the background and logs output to output.log.

Your app should now be accessible persistently! 🎉  
Let me know if you need further optimizations. 🚀

4o

**You said:**

i-08b9c5cf102c67a8f (angular-ec2) PublicIPs: 13.201.229.75

**ChatGPT said:**

​

**You said:**

i-08b9c5cf102c67a8f (angular-ec2) PublicIPs: 13.201.229.75

**ChatGPT said:**

Your Angular app should be accessible at:

👉 **http://13.201.229.75:4200/**

If you can't access it, check the following:

**✅ Troubleshooting Steps:**

1️⃣ **Ensure Angular is Running**  
Run:

sh

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ps aux | grep ng

If ng serve is not running, restart it:

sh

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ng serve --host 0.0.0.0 --port 4200

2️⃣ **Check Security Group Rules**

* Go to **AWS EC2 Console** → **Security Groups**
* Find the security group attached to your EC2 instance.
* Ensure **Inbound Rules** allow **TCP traffic on port 4200** from **Anywhere (0.0.0.0/0)**.

3️⃣ **Verify Firewall Rules**  
Run on EC2:

sh

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sudo ufw allow 4200

sudo ufw enable

4️⃣ **Try Curl from EC2**

sh

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curl http://localhost:4200

* If you get an HTML response, the app is running.

5️⃣ **Use nohup or tmux to Keep Angular Running**

sh

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nohup ng serve --host 0.0.0.0 --port 4200 > output.log 2>&1 &

Try again and let me know if you need help! 🚀

4o