

How to Deploy Angular Application to Heroku



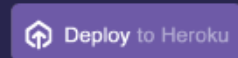
Olutunmbi Banto

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Oct 27, 2017 · 5 min read



@hellotunmbi

 Deploy to Heroku

DEPLOYING YOUR ANGULAR APPLICATION TO HEROKU

It has always ‘seemed’ easy until you try it. Having deployed other apps to heroku, I encountered series of challenges deploying Angular 4 recently but I pulled through finally. So am writing to explain in details how I did it.

This article will show you guides on deploying your Angular 2/4 apps easily to Heroku, more importantly, avoiding common pitfalls.

This is not a tutorial to help you learn Angular. It will be assumed you have completed development and ready to deploy. However, we’ll setup basic angular project from start and deploy. This tutorial will cover:

- Creating basic angular project
- Setting automatic deployment from GitHub to Heroku
- Deploying Angular app on Heroku server

Setup Your Angular Application

Making use of the Angular CLI, setup a new project by running:

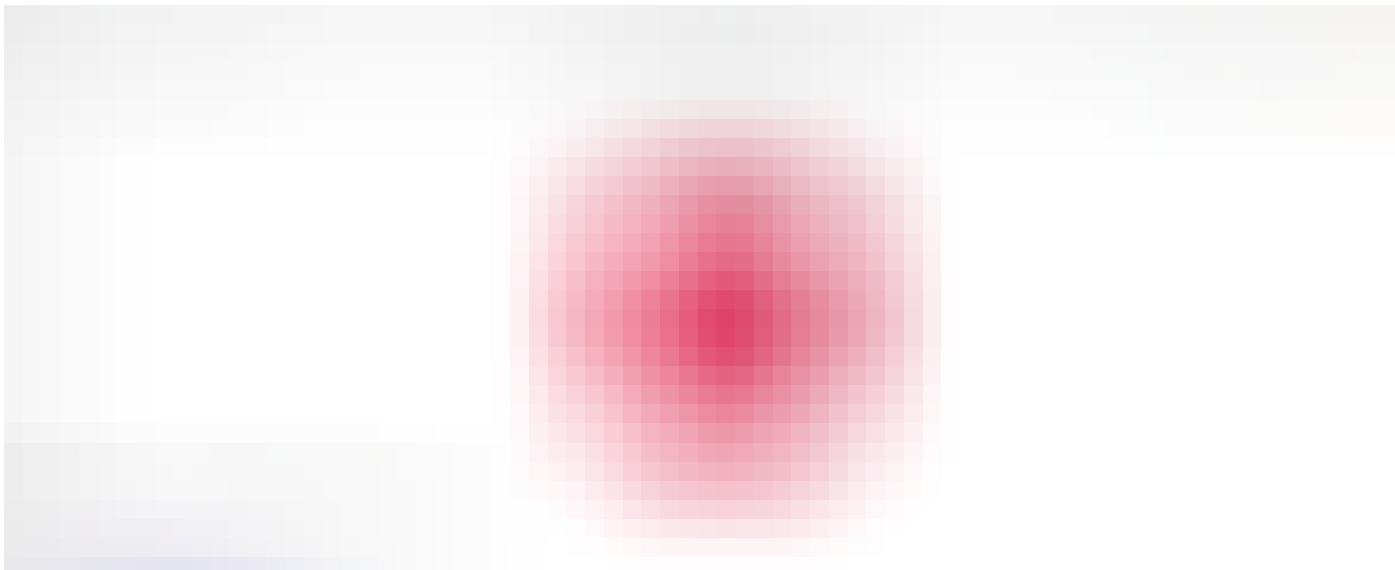
```
ng new demo-deploy
```

From this, our application will be named `demo-deploy` . Allow for few minutes to setup the new project and install npm packages.

Launch Application

Change directory into new project and launch it using the commands below. This will open in new browser on port 4200 by default. i.e <http://localhost:4200>.

```
cd demo-deploy  
ng serve
```





Angular app greets you welcome

Our basic angular app is ready and running—locally. Lets push to github

Create its GitHub repo and Push

Here, we'll be creating a fresh github repository and pushing our app to it.

- Login to github and create new repository. No need to initialize repository with README
- Open new tab in your terminal/CMD. Or hit Ctrl+C to stop running app. Then run the following commands:

```
git remote add origin <new_github_repository_url>
```

```
git add .
```

```
git commit -m "initial commit"
```

```
git push -u origin master
```

Now our app is on github.

Setup Automatic Deployment from GitHub to Heroku

Advantage of this step is so that, once you push a change to your github repository, it automatically pushes the change to your codebase on heroku, which then takes effect live on the web. This means, you'll only have to push your changes to github and its done.

If you dont have an account yet, create one on [heroku website](#). Its free. Login to your dashboard and create a new app.



create a new app on heroku



Click **Create app**

In the **Deploy** menu, under **Deployment method**, select **GitHub**. If you have not done this already, it will ask you to login your github account so it can connect to it.

Enter the name of the GitHub repository and click **Search**. Once the repo is shown below, click **Connect**. Viola!



Uh, wait. Two more simple steps.

1. Under Automatic Deploys, select the master branch and click Enable Automatic Deploys.
2. Under Manual Deploys, click Deploy Branch. This is to push our fresh code to heroku.



Okay, we'r done with this stage really. It might take a little while but will show you successfully deployed message once done, like so:



If you click View, a new tab will be opened but your app will not display. Next series of steps will guide you on configuring and spinning up your angular app.

Configure Your Angular App to Deploy Properly on Heroku

The following are production-ready steps to easily and properly deploy your app without hitches.

Ensure you have the latest version of angular cli and angular compiler cli.

Install them into your application by running this commands in your terminal:

```
npm install @angular/cli@latest @angular/compiler-cli --save-dev
```

In your package.json, copy

```
"@angular/cli": "1.4.9",  
"@angular/compiler-cli": "^4.4.6",
```

from devDependencies to dependencies

Create postinstall script in package.json

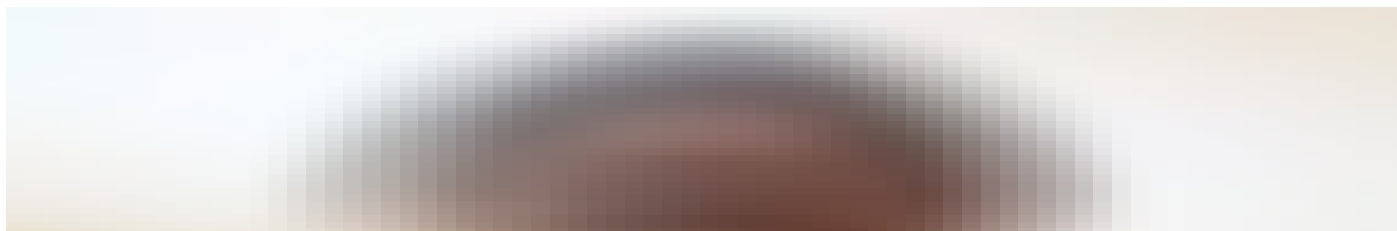
Under “scripts”, add a postinstall command like so:

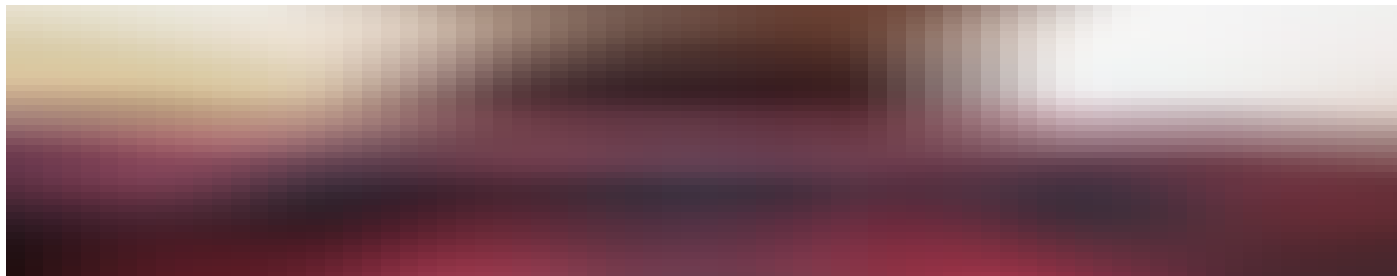
```
"postinstall": "ng build --aot -prod"
```

This tells Heroku to build the application using Ahead Of Time (AOT) compiler and make it production-ready. This will create a `dist` folder where all html and javascript converted version of our app will be launched from.

Add Node and NPM engines

You will need to add the Node and NPM engines that Heroku will use to run your application. Preferably, it should be same version you have on your machine. So, run `node -v` and `npm -v` to get the correct version and include it in your package.json file like so:





Copy typescript to dependencies.

Copy `"typescript": "~2.3.3"` from devDependencies to dependencies to also inform Heroku what typescript version to use.

Install Enhanced Resolve 3.3.0

Run the command `npm install enhanced-resolve@3.3.0 --save-dev`

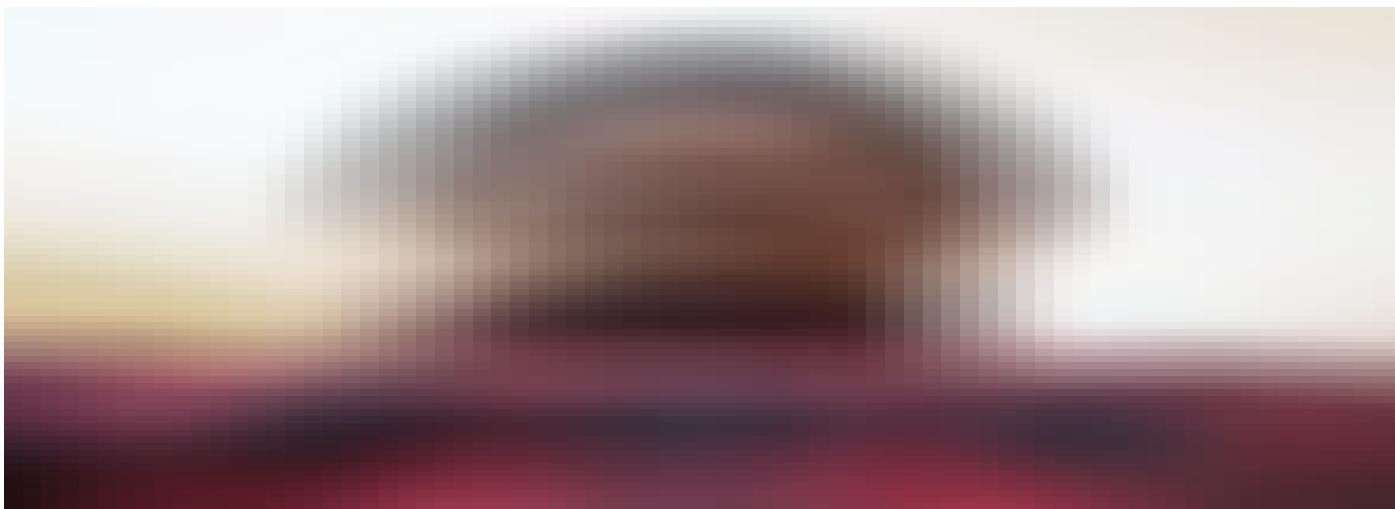
Install Server to run your app

Locally we run `ng serve` from terminal to run our app on local browser. But we will need to setup an Express server that will run our production ready app (from dist folder created) only to ensure light-weight and fast loading.

Install Express server by running:

```
npm install express path --save
```

Create a `server.js` file in the root of the application and paste the following code.

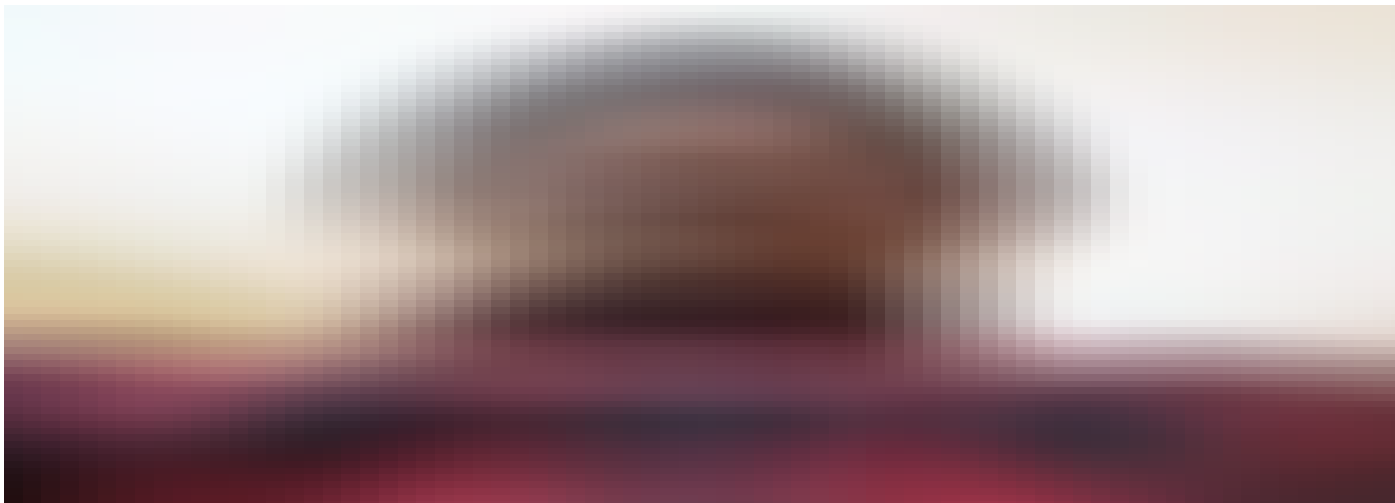


Change start command

In `package.json`, change the “start” command to `node server.js` so it becomes:

```
"start": "node server.js"
```

Here’s what the complete `package.json` looks like. Yours may contain more depending on your application-specific packages.



Push changes to GitHub:

```
git add .  
git commit -m "updates to deploy to heroku"  
git push
```

At this point, your application on Heroku will automatically take the changes from GitHub and update itself.

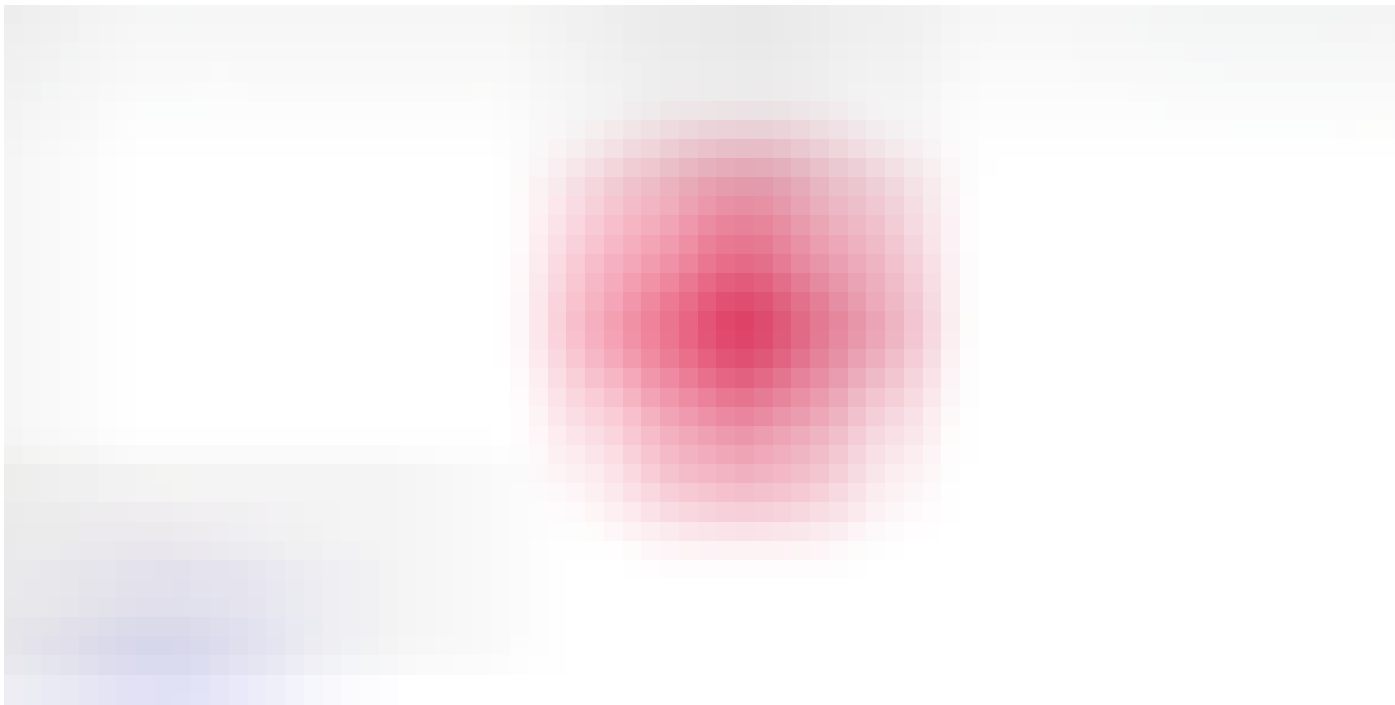
Also, it'll look into your package.json and install packages.

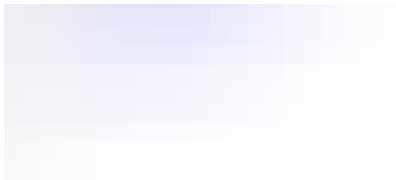
It will run the postinstall and then, `node server.js` to spin up your application.

You can check Activity tab and open Build log to see how it actually runs.

You should not run into any issue. I followed through while writing this post also and.

Viola!! Our Angular app is Ready and LIVE!





For following through till this stage, Thank you.

You can follow me on [Twitter](#) or here on Medium.

Say cheese! ... comment below, also if you encountered any issue or want to suggest better ways.

JavaScript

Heroku

Angular

Github

Development

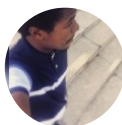
2.1K claps



56



...



Olutunmbi Banto

Fullstack Developer | PHP | Javascript | Tennis Lover

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Responses



Write a response...

Applause from Olutunmbi Banto (author)



Will B

May 17, 2018 ·

Nice article. Thanks!

I only had an issue with the script “postinstall”: “ng build --aot -prod” :

Unknown option: ‘-p’

I had to use the following script:

“heroku-postbuild”: “ng build --prod”

Thanks for your article

23

1 response 

Applause from Olutunmbi Banto (author)



dash Sat

Jan 21, 2018 ·

Good article.

I was deploying a full fledged completed project.

Got error in post install.It is a known issue.Solved it by using :

ng build—env=prod

Hope this helps somebody.

20

1 response 

Applause from Olutunmbi Banto (author)



tanya milanova

Aug 6, 2018 ·

Great article. Thanks a lot! Help me to deploy Angular 6 project. Only change this `"postinstall": "ng build --aot -prod"` with this `"postinstall": "ng build --prod"`.

25



Applause from Olutunmbi Banto (author)



John Meier

Feb 28, 2018 · 1 min read

I'm getting an error when I visit a path attached to my app domain. For example www.myapp.herokuapp.com loads properly but www.myapp.herokuapp.com/home yields the following error:

```
Cannot GET /home
```

EDIT (found fix):

Read more...

12



Applause from Olutunmbi Banto (author)

KRIPA SHANKAR JHA



May 16, 2018 ·

In My case it Worked After

`“postinstall”: “ng build <space>— aot=prod”`

4



Applause from Olutunmbi Banto (author)



Ibrahim Badivi

Jan 9, 2018 ·

Nice! Thanks!

3



Applause from Olutunmbi Banto (author)



Muhammad Usman Nadeem

Jan 6, 2018 ·

nice article buddy,

keep it up

4



Conversation between [Alexander Jacks](#) and [Olutunmbi Banto](#).



[Alexander Jacks](#)

Mar 8, 2018 ·

Brilliant, very helpful guide! Thank you!

I found I needed to update Typescript before my project could compile and deploy. Check the error log—mine suggested:

```
npm install typescript@'>=2.4.2 <2.7.0'
```

And it may have updated again by today. Cheers, thank you!

1

1 response 



[Olutunmbi Banto](#)

Mar 8, 2018 ·

Oh okay Alex. Thanks for the suggestion. Thats the thing with package versions, they get outdated regularly. I'll keep mine updated too.

Thanks





[Laerti Papa](#)

Mar 17, 2018 ·

Hey nice article. Thanks.

I would update to use the following middleware as well:

```
// server.js

const path = require('path');

app.get('/*all', function(req, res) {
  res.sendFile(path.join(__dirname + '/dist/index.html'));
});
```

1

1 response 



[Olutunmbi Banto](#)

Apr 12, 2018 ·

Thanks [Laerti Papa](#).

Do feel free to submit a pull request and I'll update the writeup accordingly.



Conversation between [Bob Sheehan](#) and [Olutunmbi Banto](#).



[Bob Sheehan](#)

Apr 28, 2018 ·

Perfect. I had a starter seed with ng2 and webpack. I wanted to use express but needed this help ! I am able to build using webpack but use 'node server.js' (npm start) to serve index.html after heroku push.

1

1 response



[Olutunmbi Banto](#)

Apr 28, 2018 ·

Oh great! I'm happy the article helped you.



Applause from Olutunmbi Banto (author)



[Rokin Maharjan](#)

Mar 11, 2018 ·

Worked for me. Thanks! :)

1



Applause from Olutunmbi Banto (author)



Saravanan Nandhan

Apr 21, 2018 ·

Hey nice article. Thanks.

1



Conversation between [David Casanellas](#) and [Olutunmbi Banto](#).



David Casanellas

May 30, 2018 · 1 min read

Great article! It saved my life! I was able to deploy on Heroku thanks to this article.

There is just a little tweaking that some might need to do on server.js:

- `app.use(express.static(__dirname + '/dist'));` → remove `__dirname` in case the build folder is located in the root. →...

Read more...

1

2 responses



[Olutunmbi Banto](#)



May 31, 2018 ·

Thanks. I'm glad you found it so helpful. Also, thanks for the suggestions.



Applause from Olutunmbi Banto (author)



Shane Besong

May 4, 2018 · 1 min read

Nice article! I just wanted to point out one roadblock I ran into with bundling into the /dist folder. I'm running node 10.0.0 and npm 5.6.0, with angular compiler and compiler-cli versions ^6.0.0.

When I ran `ng build --prod` (which runs `--aot` by default with the prod flag), my index.html file was getting bundled into...

Read more...

1



Conversation between [Alberto Güerere](#) and [Olutunmbi Banto](#).



Alberto Güerere

Apr 11, 2018 ·

This worked so beautifully! Thanks!

1

2 responses 



Olutunmbi Banto

Apr 12, 2018 ·

Thanks **Alberto Güerere**. I'm glad



Applause from Olutunmbi Banto (author)



Ryan Vong

Oct 25, 2018 ·

Very nice. This works for me except for the postinstall script. I think you have a typo for prod. There should be double dashes before prod instead of single dash.

This works for me.

“postinstall”: “ng build—aot—prod”

1





[Yashwardhan Pauranik](#)

May 2, 2018 ·

Where I have to create `server.js` file? Inside demo_project > server.js
or demo_project > src > server.js ?

1 response



[Olutunmbi Banto](#)

May 2, 2018 ·

You should create it in demo_project. So it becomes demo_project/server.js

5

1 response



[Yashwardhan Pauranik](#)

May 2, 2018 ·

I've created it at right place. Thank you. But now I'm facing problem of Mix
Content when accessing the page on Heroku... can you help me to fix that
issue..

1 response



Olutunmbi Banto

May 2, 2018 ·

Okay. To prevent this thread from getting too long. Follow me on twitter:
[@hellotunmbi](#) and let me help you resolve it in DMs (private chat)

