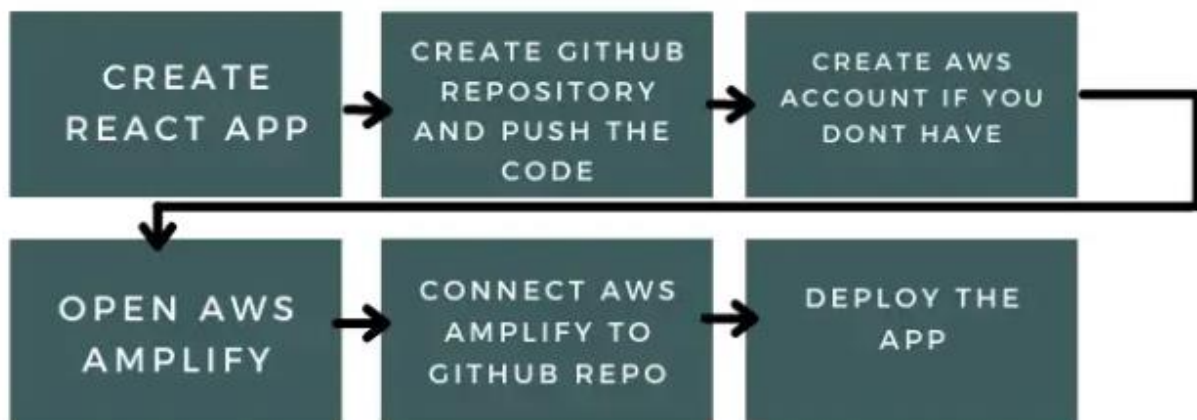


How to deploy a React Application on AWS Amplify

AWS Amplify is a set of tools and features that lets front-end web and mobile developers quickly and easily build full-stack applications on AWS, with the flexibility to leverage the breadth of AWS services as your use cases evolve. With Amplify, you can configure a web or mobile app backend, connect your app in minutes, visually build a web frontend UI, and easily manage app content outside the AWS console.

We will follow these steps to get our app deployed.



Step 1: Create react app

Make sure you have Nodejs installed in your machine.

```
npx create-react-app react-aws-amplify
cd my-app
npm start
```

```
PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE  node + v [ ] [ ] ^ X

PS D:\MIU\CS516\blogapp> npx create-react-app .

Creating a new React app in D:\MIU\CS516\blogapp.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1395 packages in 2m

214 packages are looking for funding
  run `npm fund` for details

Initialized a git repository.

Installing template dependencies using npm...

added 71 packages in 8s

226 packages are looking for funding
  run `npm fund` for details
Removing template package using npm...

removed 1 package, and audited 1466 packages in 4s

226 packages are looking for funding
  run `npm fund` for details

6 high severity vulnerabilities

Compiled successfully!

You can now view blogapp in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.33.1:3000

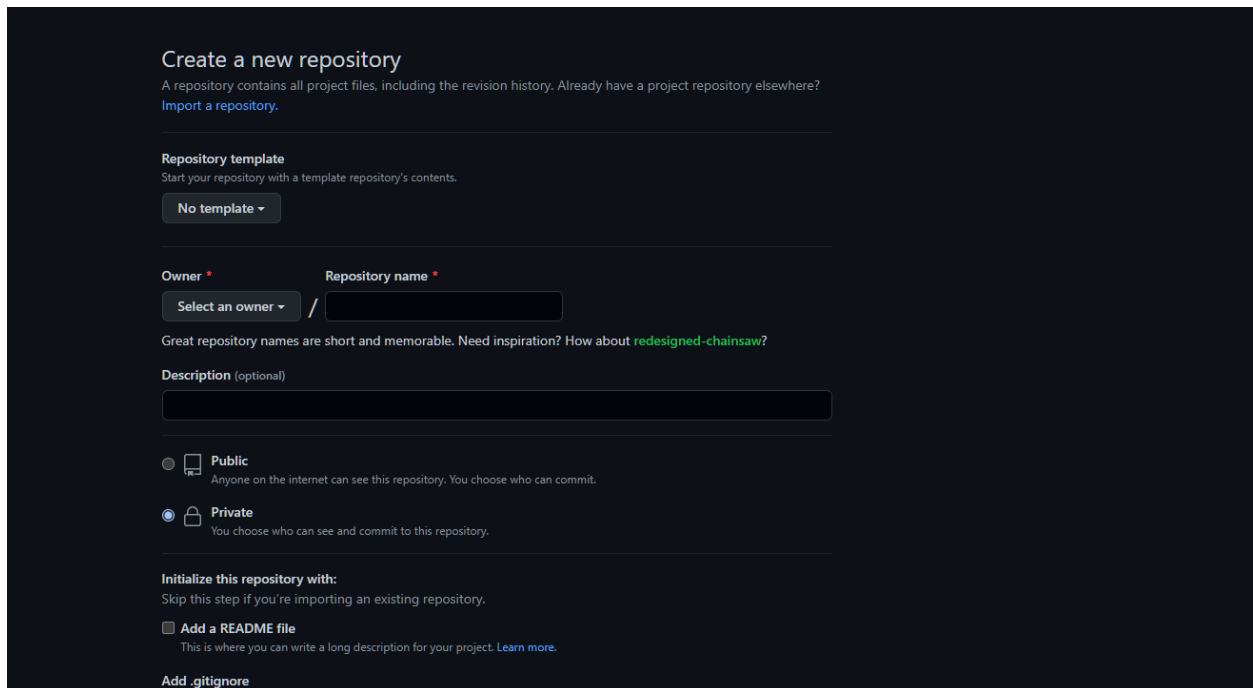
Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
[ ]
```

Our app is up and running. you can check by visiting `http://localhost:3000`

Step 2: Create GitHub repository

We need to hold our code somewhere in the cloud. We can use GitHub, GitLab, Bitbucket, AWS CodeCommit.



The screenshot shows the GitHub 'Create a new repository' page. At the top, it says 'Create a new repository' with a subtitle 'A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.' Below this is a 'Repository template' section with a 'No template' button. The main form has two input fields: 'Owner' (with a dropdown menu) and 'Repository name' (with a text input). Below these is a hint: 'Great repository names are short and memorable. Need inspiration? How about redesigned-chainsaw?'. There is a 'Description (optional)' text input field. Underneath, there are two radio button options: 'Public' (selected) and 'Private'. At the bottom, there is a section 'Initialize this repository with:' with a checkbox for 'Add a README file' and a link 'Learn more.' Below that is a link 'Add .gitignore'.

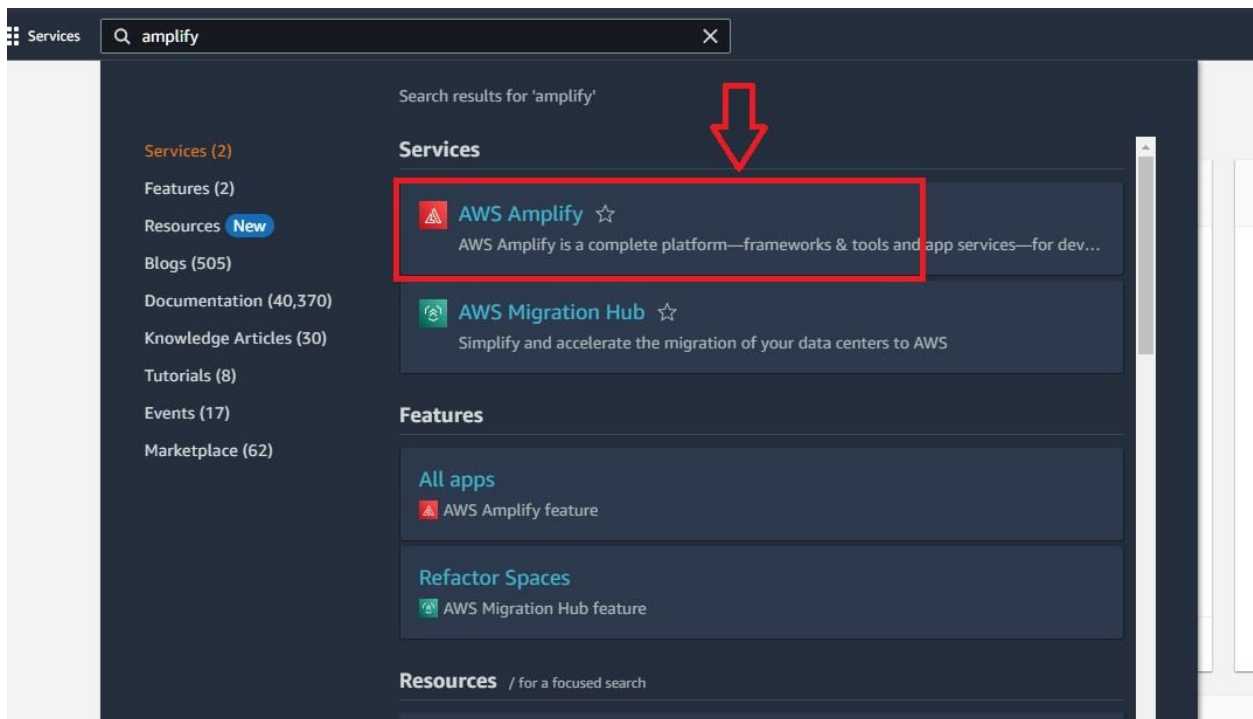
Step 3: Pushing the code to the repo

After creating the repo, you can copy all these lines.

Now we have a repo that contains our code.

Step4: Deploy our app on AWS using Amplify

After creating your account, visit the AWS console and search for Amplify.



Under Amplify Hosting section, click on Get started

Get started

Amplify Studio



Build an app

Build an app backend with auth, data, and storage, and create custom UI components. Then integrate them in your app with just a few steps.



Get started

Amplify Hosting



Host your web app

Connect your Git repository to continuously deploy your frontend and backend. Host it on a globally available CDN.



Get started



Already have existing Cognito, S3, or other AWS resources? Connect to them from your app with the Amplify Libraries. [Go to docs](#)

Choose your provider. in our case. We have our code in Github.

Get started with Amplify Hosting

Amplify Hosting is a fully managed hosting service for web apps. Connect your repository to build, deploy, and host your web app.

From your existing code

Connect your source code from a Git repository or upload files to host a web app in minutes.

☒ GitHub



☐ Bitbucket



☐ GitLab



☐ AWS CodeCommit



☐ Deploy without Git provider




Continue


Sign in to GitHub, choose the repo you want to deploy, and select the branch.



AWS Amplify (us-east-1) by **AWS Amplify Console** would like permission to:

 Verify your GitHub identity (Patrick-BP)

 Know which resources you can access

 Act on your behalf
[? Learn more](#)

[Learn more about AWS Amplify \(us-east-1\)](#)

Cancel

Authorize AWS Amplify (us-east-1)

Authorizing will redirect to
<https://us-east-1.console.aws.amazon.com>

 Not owned or operated by GitHub

 Created 4 years ago

 More than 1K GitHub users



Install & Authorize AWS Amplify (us-east-1)

Install & Authorize on your personal account Patrick



☐ **All repositories**

This applies to all current *and* future repositories owned by the resource owner.
Also includes public repositories (read-only).

☒ **Only select repositories**

Select at least one repository.
Also includes public repositories (read-only).

Select repositories ▾



Selected 1 repository.

Patrick-BP/myblog



with these permissions:

- ✓ **Write** access to files located at `amplify.yml`
- ✓ **Read** access to code and metadata
- ✓ **Read and write** access to checks, pull requests, and repository hooks

Install & Authorize

Cancel



After you click, you'll be redirected to <https://us-east-1.console.aws.amazon.com/amplify/home?region=us-east-1>

App repository Branch

Step 1
Add repository branch

Step 2
Build settings

Step 3
Review

Add repository branch

GitHub

✔ GitHub authorization was successful. 1

Repository service provider
GitHub

Recently updated repositories
Patrick-BP/myblog

If you don't see your repository in the dropdown above, ensure the Amplify GitHub App has permissions to the repository. If your repository still doesn't appear, push a commit and click the refresh button. View GitHub permissions

Branch
Select a branch from your repository.
main

☐ Connecting a monorepo? Pick a folder.

Cancel Previous **Next** 2 3

Build Settings

Step 1
Add repository branch

Step 2
Build settings

Step 3
Review

Build settings

App build and test settings

App name
Pick a name for your app.
myblog
Name cannot contain periods

Build and test settings
We've auto-detected your app's build settings. Please ensure your build command and output folder (baseDirectory) are correctly detected.

```
1 version: 1
2 frontend:
3   phases:
4     preBuild:
5       commands:
6         - npm ci
7     build:
8       commands:
9         - npm run build
10  artifacts:
11    baseDirectory: build
12    files:
13      - '**/*'
14  cache:
15    paths:
16      - node_modules/**/*
17
```

Build and test settings Download Edit 2

► Advanced settings

Cancel Previous **Next**

Step 1

Add repository branch

Step 2

Build settings

Step 3

Review

Review

Repository details

| | |
|--------------------|--------------------|
| Repository service | Branch environment |
| GitHub | |
| Repository | Application root |
| Patrick-BP/myblog | |
| Branch | |
| main | |

App settings

Edit

| | |
|-----------------------|-------------------------------------|
| App name | Framework |
| myblog | React |
| Build image | Build settings |
| Using default image | Auto-detected settings will be used |
| Environment variables | |
| None | |

Cancel

Previous

Save and deploy

Check the deployment status.

Wait for provision => build => Deploy

All apps > myblog

myblog

The app homepage lists all deployed frontend and backend environments.

Learn how to get the most out of Amplify Hosting0 of 5 steps complete


Hosting environments

Backend environments

This tab lists all connected branches, select a branch to view build details.

main

Continuous deploys set up (Edit)



Provision

Build

Deploy

Last deployment

12/17/2022, 5:47:14 PM

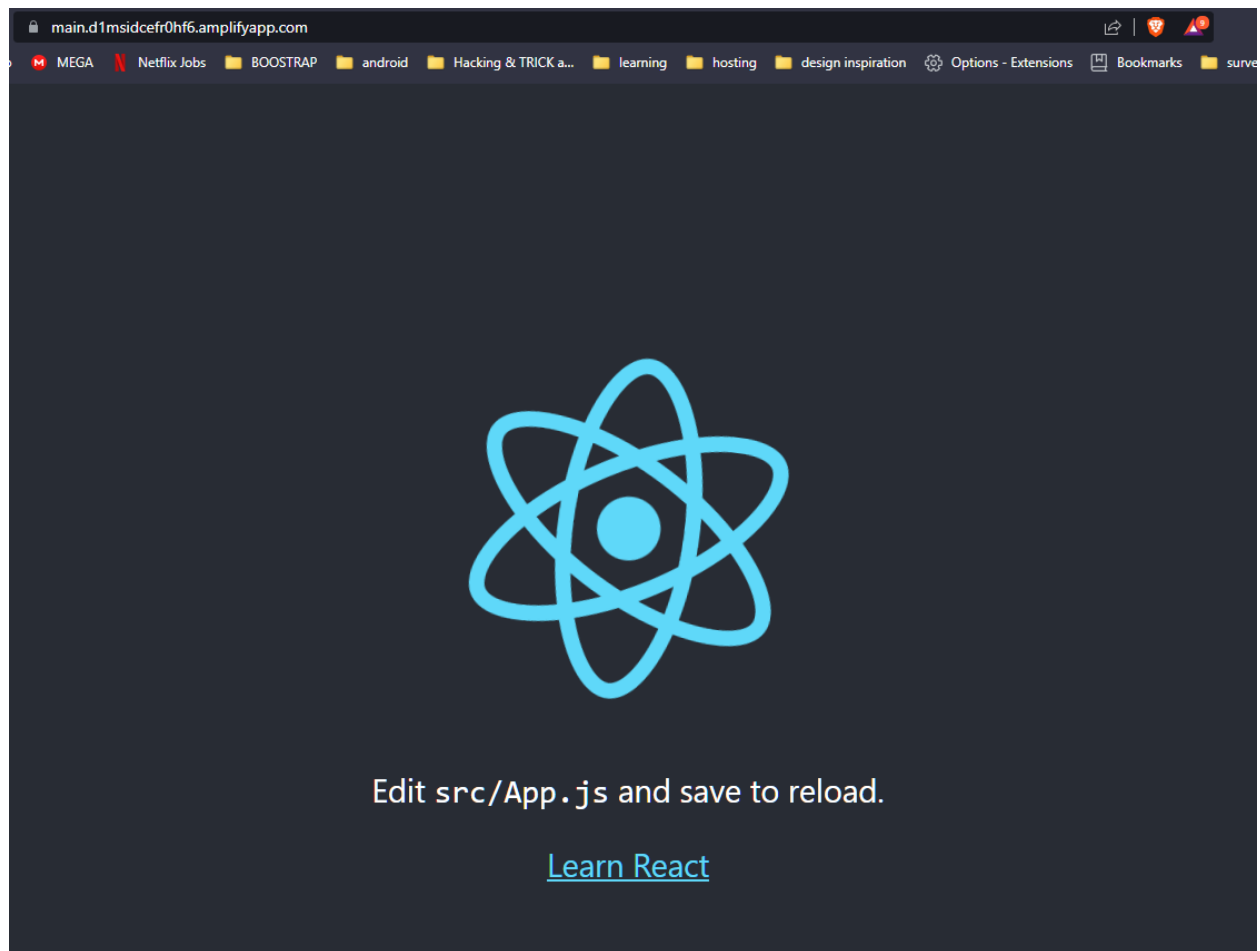
Last commit

This is an autogenerated message | Auto-build | GitHub - main

Previews

Disabled

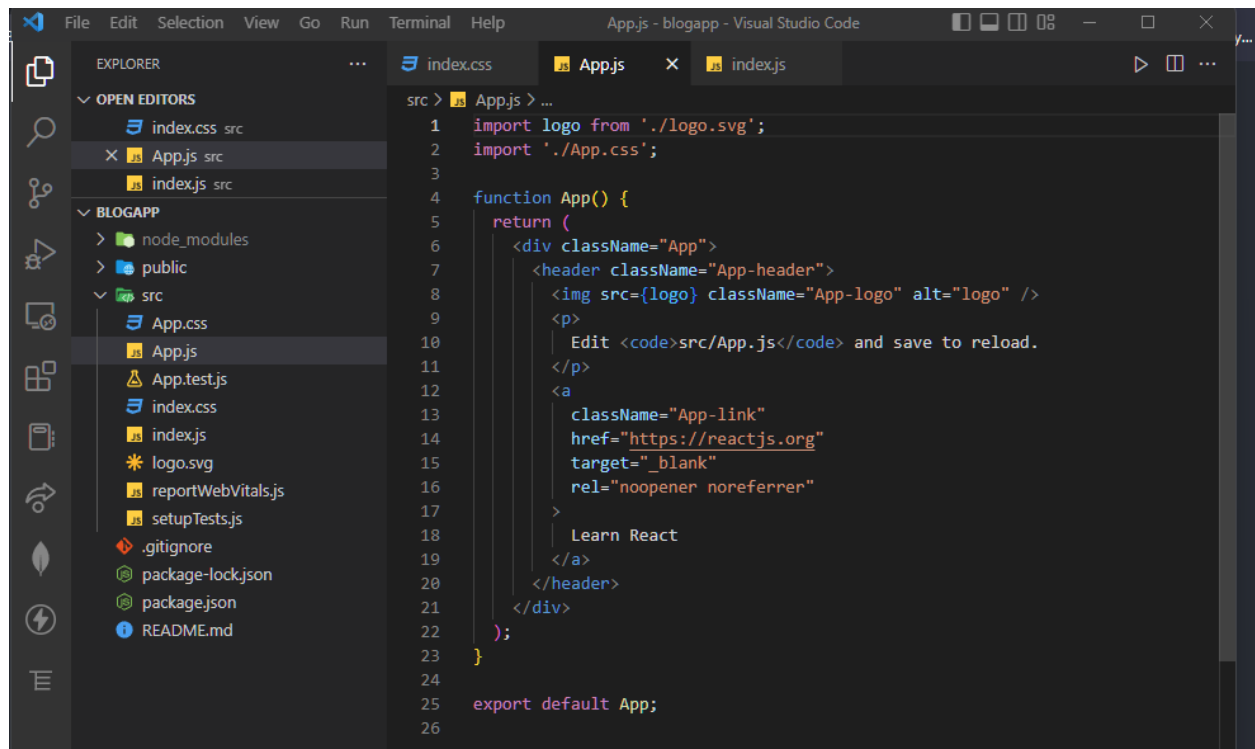
Click on the site URL.



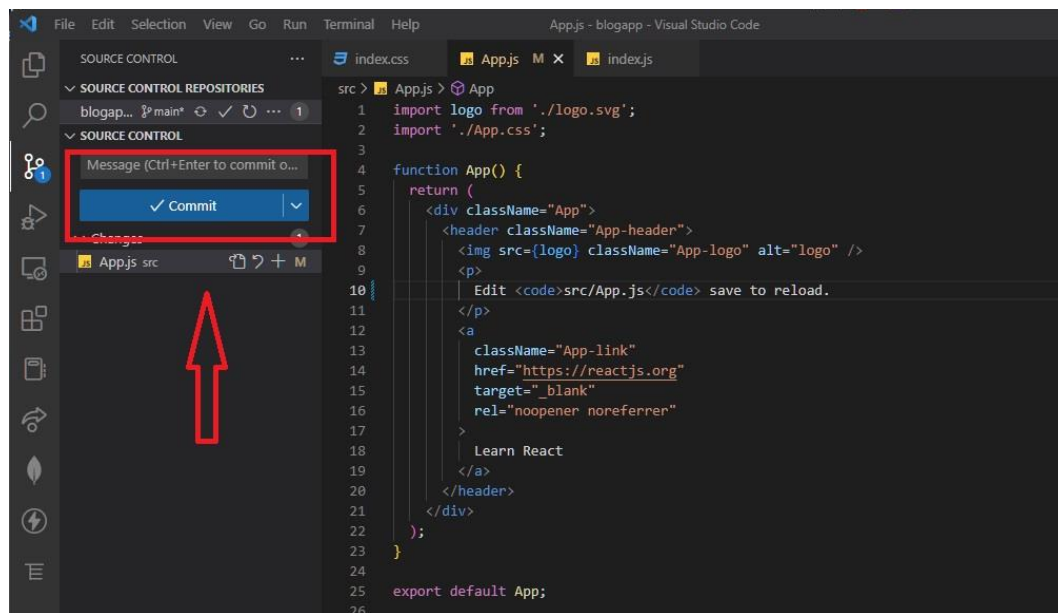
Finally, our app is live, and anyone can use it.

Do you want to make any changes??

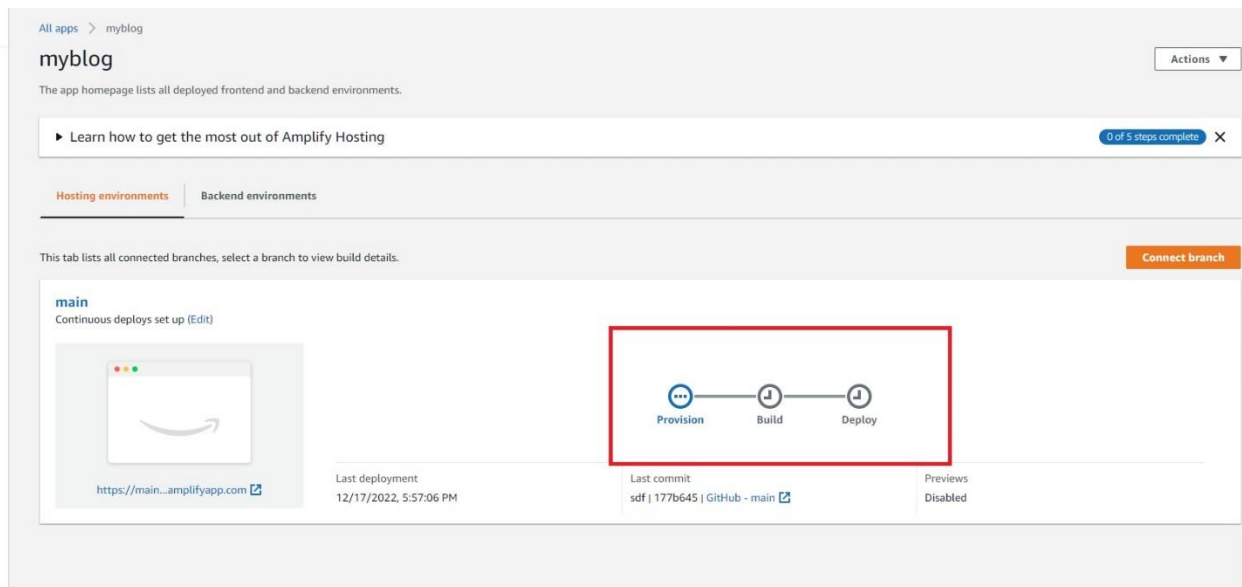
1. Edit the code



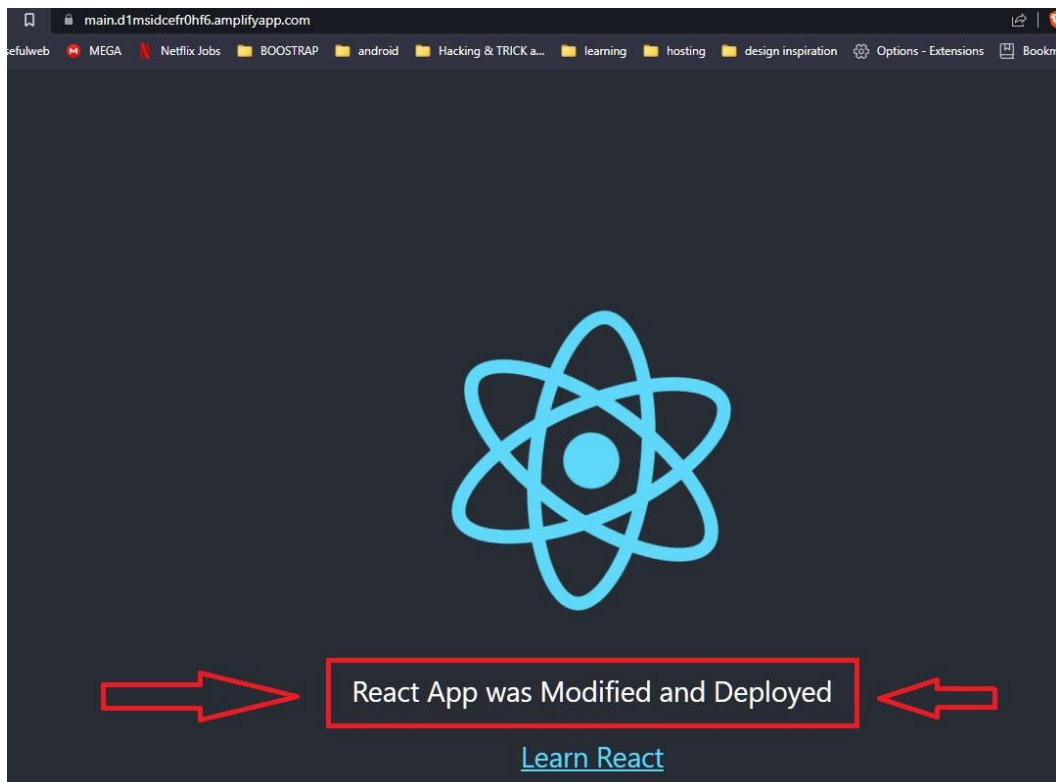
2. commit the changes and push it



Open the browsers again you will see the changes.



Result



Conclusion

In this article, we learned step by step how to create a react app from scratch and push it to Github, then deploy it to AWS Amplify.

You can deploy your backend apps using Amplify

Coming soon in the next blog