

# Deploying a web app

We've written web apps

- Seen them on "localhost"

How to get them where other people can see?

# Static-vs-dynamic

You need a **host** for your content

A big factor is what you need to host

- static HTML/JS/CSS
  - `build/` contents after `npm run build`
- OR a server that generates dynamic content
  - Directly or via web services

Just static is easier/cheaper

- Limited functionality
- Great for one-way information flow

# **A few options**

There are countless hosting providers

- Here are a few free/cheap options
  - I've used or heard recommended
  - Not an endorsement
  - Not exhaustive list
- Good to show off
  - Anything with high traffic/high reliability should pay for stronger options

# Github pages

<https://docs.github.com/en/pages>

- Static only
- Either a site for repo, or a site for you
- Change settings to publish a `github.io` site

Confusing: Some options we DON'T want:

- We aren't building a site from `.md` files using Jekyll
- `gh-pages` CAN be used, not required
- Docs confuse by talking about both

# Creating a GitHub Pages site for a repo

- Will publish to `https://{USER}.github.io/{REPO}/`
  - Or configure a domain you have registered
  - Registering a domain separate process (\$)

**<https://create-react-app.dev/docs/deployment#github-pages>**

- If not using React
  - `gh-pages` can deploy directory to site
  - You configure which one

# **Vercel offers hosting for various frameworks**

- Create-react-app on list
- Vercel is notable for Next.js (server-side React)
- Works by having a separate github repo
  - Push to that repo to deploy to site

# Fly.io has more free options

<https://fly.io/docs/speedrun/>

- Free tier for a lot of options
- Static requires running a server
  - Which you have to provide
  - But the docs have a demo
- I had some errors/bumps

# **Render offers free STATIC hosting, \$ for more**

**<https://render.com/>**

- I've not used them
- Wanted more access to my repo than I liked

**<https://create-react-app.dev/docs/deployment#render>**



# Amazon Web Services (AWS)

Notice: Most of AWS isn't always free

- And can wrack up bills if you exceed use
- BE CAUTIOUS

You have many options with Amazon

- S3 can host static websites
- Amplify can host a single page app
- Lightsail

```
https://docs.aws.amazon.com/AmazonS3/latest/  
userguide/WebsiteHosting.html
```

# Summary - Hosting

- **Hosting providers**
  - Places to put your web content as a site
  - Offer their domain by default
  - You have to register a domain separately (\$)
    - Then configure host to use domain
- **Static files** (HTML/JS/CSS) vs server is a big factor
  - "Serverless" = Static files calling web services
    - Web services on other server than host
- Free and Paid options exist

# Summary - options

- So many hosting options
- Some examples:
  - Github pages
  - Vercel
  - Render
  - Fly
  - AWS S3
  - AWS Amplify
  - AWS Lightsail