INTRO TO HACKATHONS

01 SERVING THE WEB

1.

WHAT'S THE PLAN?

SCHEDULE

» Serving The Web	Today!
» Front End	Thursday 1 March
» APIs	Thursday 8 March
» Deployment	Thursday 15 March

All at 6pm in Computer Room 4, The Diamond

- Hackathon project over the 4 weeks
- Using Node.js, Express, Pug, Bootstrap and more
- It involves dog GIFs...

We will be using Glitch (a bit like Codio), so you don't need to install anything. It runs Node.js

bit.ly/glitch-hs-18

Open this link in two tabs: one will stay the same as my copy,
the other you can edit freely

QUESTIONS & QUIBBLES

- These workshops are open to all abilities
- If you don’t understand anything, ask away!
- These workshops are all about learning
- Slides will be made available

Enough waffle, let’s get started!

2.

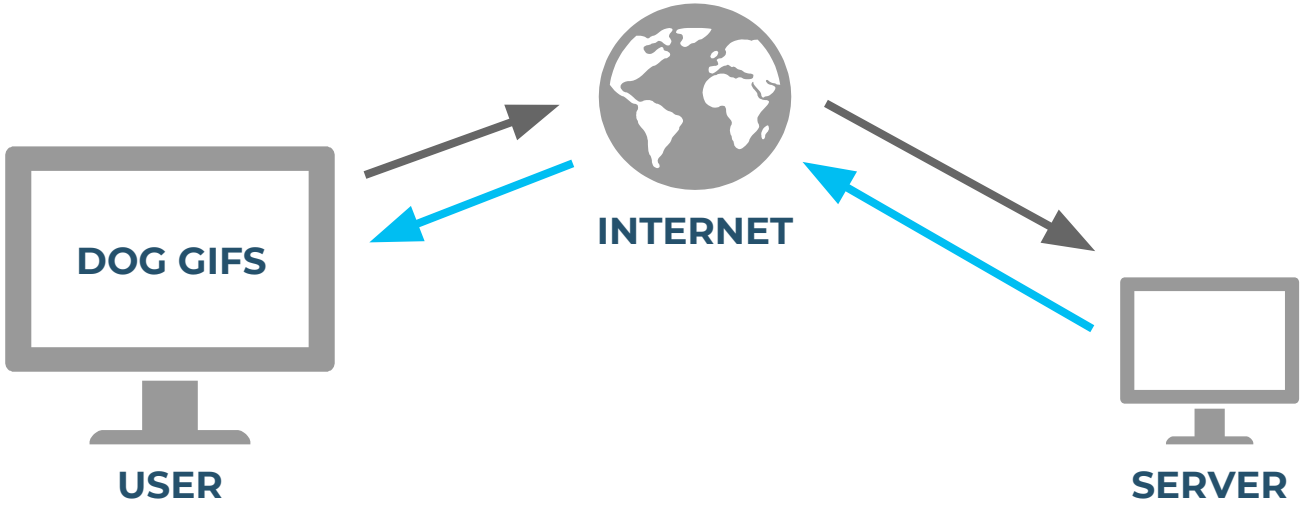
WHAT'S A SERVER?

“

Something that serves something.

GREG IVES, 2018

SERVER DIAGRAM



c253c6c3.ngrok.io

When you open this link, your computer is making a request
to my computer for our dog GIF website

Your browser sends a HTTP request, usually:

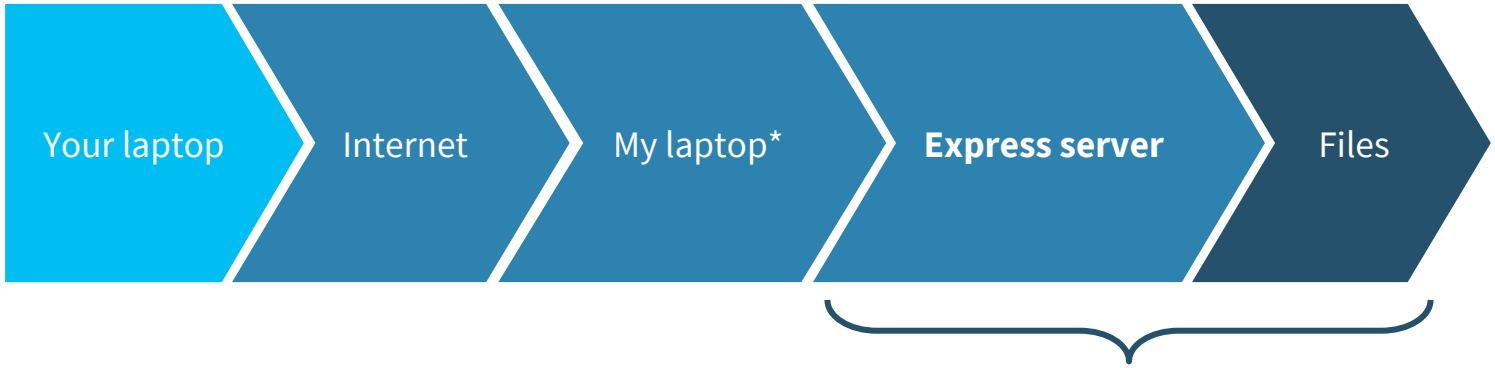
- A GET request which retrieves information
- A POST request which sends information

There is also HEAD, PUT, DELETE, CONNECT, OPTIONS and TRACE.

The server will send back a response code:

- 1xx is informational
- 2xx is success (200 OK)
- 3xx is redirection
- 4xx is a client error (403 Forbidden, 404 Not Found)
- 5xx is a server error (500 Internal Server Error)

YOUR REQUEST



What we're going to make

*Sometimes referred to as a server

3.

WHAT'S NODE.JS?

- JavaScript is usually run solely in a browser
  - Called client-side
- Node.js allows JavaScript to be run on your computer (e.g. in a CLI/terminal)
  - This is server-side
- Node.js is a JavaScript runtime environment

NPM is a repository for JavaScript ‘packages’:

- Libraries such as Bootstrap
- Frameworks such as Express

But how do we use these packages?

To install a package from NPM, you can type

```
» npm install package-name
```

Or if you have a package.json file, just type

```
» npm install
```

bit.ly/glitch-hs-18

Open this link in two tabs: one will stay the same as my copy,
the other you can edit freely

4.

WHAT'S PUG?

HTML is a markup language

- `<a href="http://link">Click me!</a>`

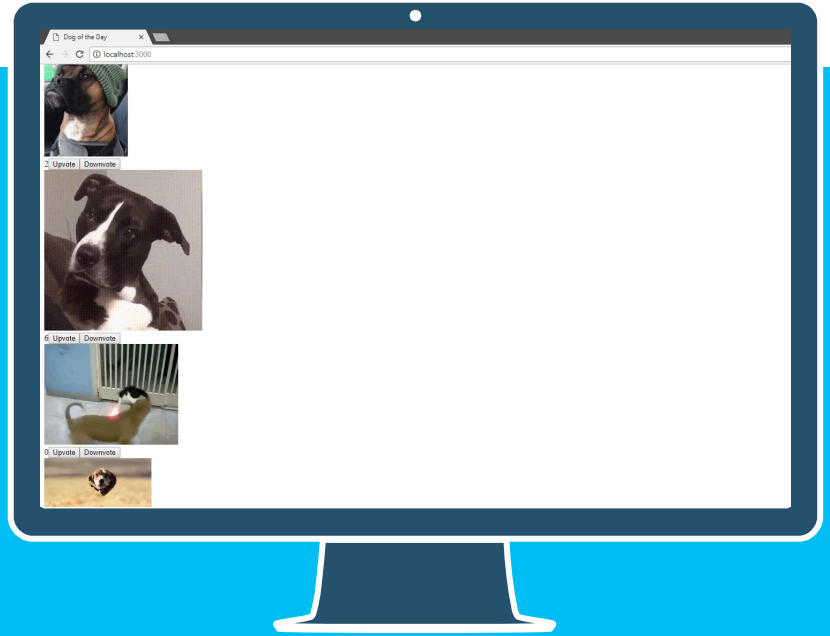
Pug is another markup language

- `a(href='http://link') Click me!`

- No angle brackets <> </>
- Attributes (e.g. href, src, data-attr) in brackets
- Space separates tag and content
- We can write inline JavaScript in a Pug file!
- Lots more...

THAT'S ALL FOR TODAY!

We have a working GIF voting website.



Any questions?