## We've been using the Browser to load pages

- File -> Open renders an html page
  - Does not load a page from a server
  - Impacts things like absolute paths
- You'll be writing HTML for pages on a server
  - We should use a server to validate our HTML

## npx will load and run NodeJS modules

- You installed NodeJS for assignment 1
  - This also installs a program called npx
  - Will load and run NodeJS modules
- serve is a program that runs a SIMPLE webserver
  - Very basic and simple
  - "dumb"

## Using npx to run serve

- At command line (terminal) run:
  - npx serve
- First time you do this it will ask if it should install
  - Say "y"
- Later uses will use that install

### The directory you are in matters!

- Remember: All commands are run "in" a folder
- Wherever you run npx serve
  - THAT folder will be "document root"
  - The / of absolute paths
  - Make sure to run server at correct directory
    - "correct" based on files intended for //
  - Assignment has work/02-basic-layout as /

#### **Filenames**

index.html is a common default file

- If you request / on the server
  - Ex: <a href="http://examplecat.com/">http://examplecat.com/</a>
  - Same as <a href="http://example.cat/index.html">http://example.cat/index.html</a>
- If you don't have any path in url
  - Browser will request /
    - Server may treat as /index.html
  - Browser may hide /
  - Ex: <u>http://examplecat.com/</u> shows as <u>http://examplecat.com</u>

### Rules about folders in Document Root

- http://example.com/cats/
  - Server MAY return http://example.com/cats/index.html
  - Not all servers use index.html as default file
    - Most do
- It may be a file or a folder!
  - http://example.com/cats
    - Might be a file named cats
    - Might be a folder named cats

### serve has some unusual quirks

- Removes the file extension
  - If you request /cats.html
    - Browser will show /cats
  - Most servers don't do this confusing change
    - Make sure your links include extension!
      - Except for links using default file
- If no index.html in requested folder
  - Will show a file listing
  - Most servers don't do this
    - Considered poor security
    - We only use serve to develop

# Stopping the server

- As with most command line programs
  - Stop program using Ctrl-C in the terminal
  - Make sure terminal window has the focus

### Some assignments use a custom webserver

- For some assignments/projects I have you run a custom webserver
  - I provide it when the time comes
- You will need to install the dependencies
  - Instructions will be in those assignments
- Otherwise, similar to npx serve
  - Run command as instructed
  - There will be a **document root**
  - Stop running with Ctrl-C

## The package-lock.json file

- Outside scope of this course to cover in detail
- Used to track EXACTLY what is installed
  - For most jobs this is committed to the repo
  - In this course, just add to \_gitignore file