CSc 337 Node and Express

Benjamin Dicken

Serve static files

- Can serve static files with express
  - HTML, CSS, Images, etc
- If you have a site that only needs static resources from the server, can just set up a simple static server!
  - Guitar World, Welcome to the Jumble, etc

Static Server

```
const express = require('express');
const app = express();
const port = 80;

app.use(express.static('public_html'));

app.listen(port, () =>
  console.log(`App listening at http://localhost:${port}`));
```
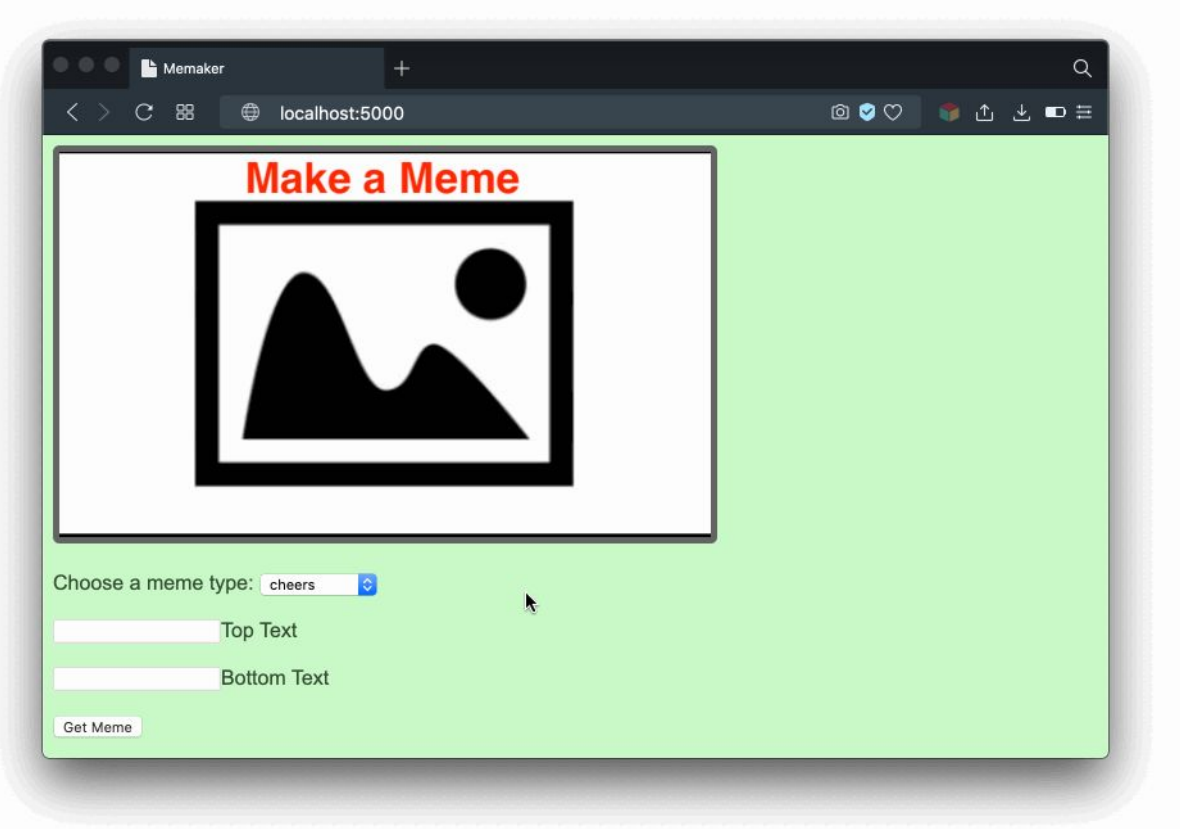
Run a local server

- Choose one of your past PAs (3, 4, or 5)
- Create a simple express static server on your computer to serve the PA files
- Run the server and connect

```
const express = require('express')
const app = express()
const port = 80
app.use(express.static('public_html'))
app.listen(port, () =>
  console.log(`App listening at http://localhost:${port}`))
```
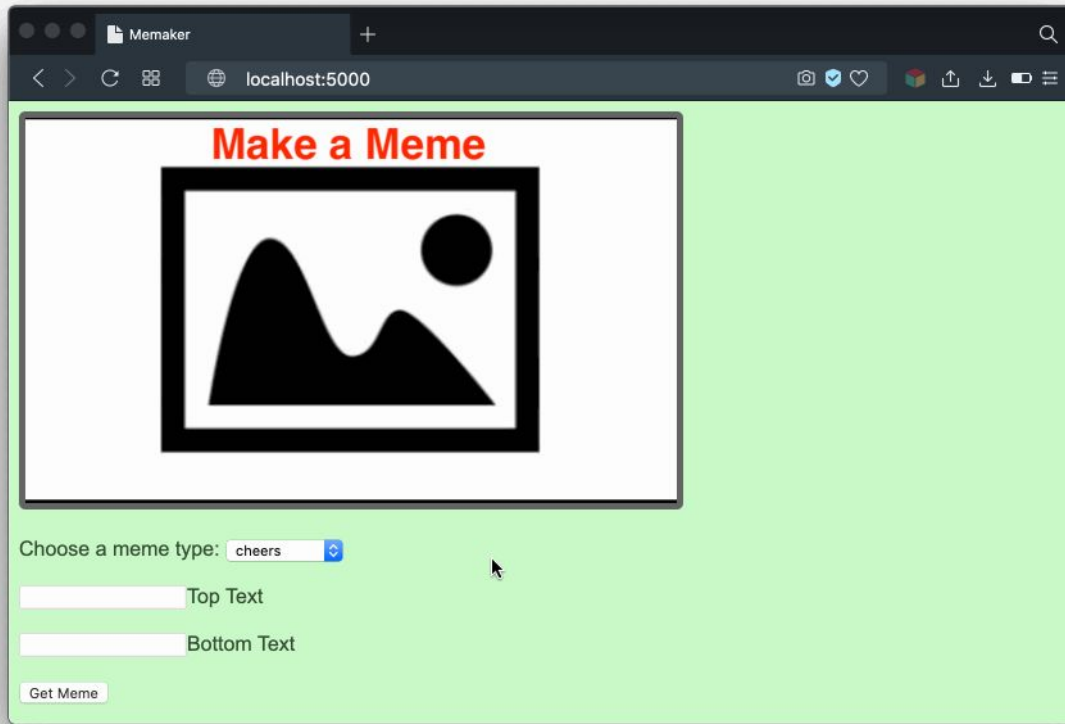
Static + Dynamic

- Can combine static and dynamic capabilities in a single server
- For instance
  - *Statically* serve image resources, CSS, or client-side javascript
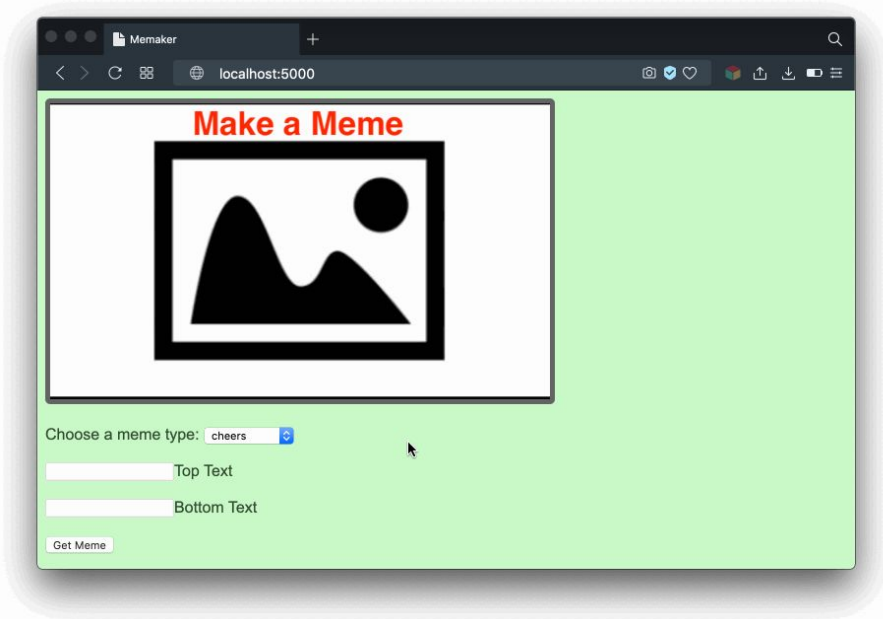 - *Dynamically* generate html with custom content based on the URL

Build the site

Build the site

What will we need to create this?

Build the site

- A combo of serving static files and dynamic response
- A module that we can use for the image processing
  - https://www.npmjs.com/package/jimp
- Express
- Client-side Js
- Client-side CSS
- Promises (optional)
  - https://www.digitalocean.com/community/tutorials/understanding-javascript-promises

```javascript
jimp.read(inputFileName,
  function(err, loadedImage){
    if (err) { return console.log(err); }
    jimp.loadFont(jimp.FONT_SANS_64_WHITE,
      function(err, font){
        if (err) { return console.log(err); }
        loadedImage
          .print(font, 10, 10, topText)
          .print(font, 10, 326, bottomText)
          .write('./public_html/' + outputFileName ,
          function (err, data) {
            if (err) { return console.log(err); }
            fs.readFile('./public_html/index.html', 'utf8',
              function (err, data) {
                if (err) { return console.log(err); }
                var result = data.replace(/.\/default.png/g, '/' + outputFileName);
                res.send(result);
              });
          });
      });
  });
```