EXPRESS 201

TRAJECTORY

- Handling URL params
- App.use and next
- Serving static resources

URL PARAMETERS
REQ.PARAMS

GET /PUPPIES/1

```
app.get('/puppies/1', (req, res, next) => {
  // send puppy with id 1
})

app.get('/puppies/2', (req, res, next) => {
  // send puppy with id 2
})

app.get('/puppies/3', (req, res, next) => {
  // send puppy with id 3
})
```

```
app.get('/puppies/:puppyId', (req, res, next) ⇒ {
  console.log(req.params.puppyId)
  // use req.params.puppyId to find the puppy with the requested id
  // and then send that puppy as the response!
})
```

APP.USE AND NEXT

```
const express = require('express')

const app = express()

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})

app.listen(3000)
```

YOUR EXPRESS APP

```
app.get(‘/‘)
```

```
app.get(‘/puppies’)
```

YOUR EXPRESS APP

```
app.get('/')
```

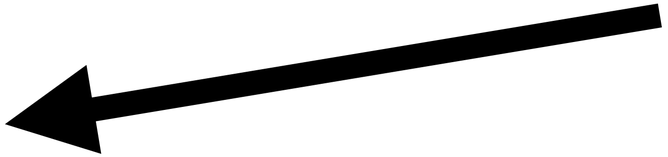
```
app.get('/puppies')
```

GET /puppies HTTP/1.1

YOUR EXPRESS APP

```
app.get('/')
```

```
app.get('/puppies')
```

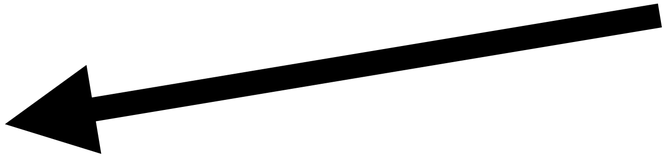


GET /puppies HTTP/1.1

YOUR EXPRESS APP

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

YOUR EXPRESS APP

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

HTTP/1.1 200 OK

Date: Wed, 03 Jan 2018 17:29:52 GMT

Connection: keep-alive

Transfer-Encoding: chunked

<h1>Welcome to the puppies page!</h1>

```
app.get('*', (req, res, next) => {
  console.log(req.method, req.url)
})

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})
```

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

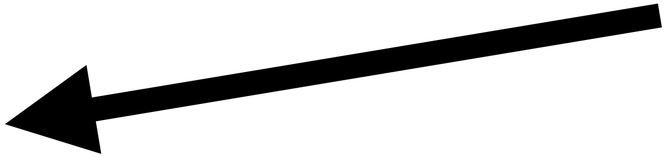
YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

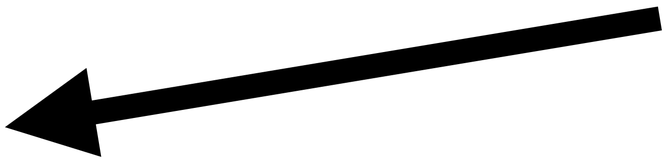


YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

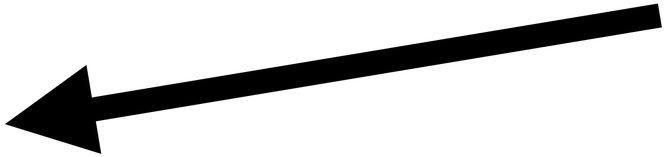
"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

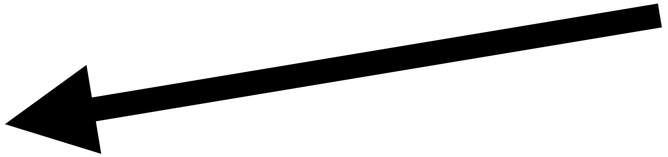
"I'm a handler for everything! I'll log something to the console and..."

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

"I'm a handler for everything! I'll log something to the console and..."

"......"

```
app.get('*', (req, res, next) => {
  console.log(req.method, req.url)
  next()
})

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})
```

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

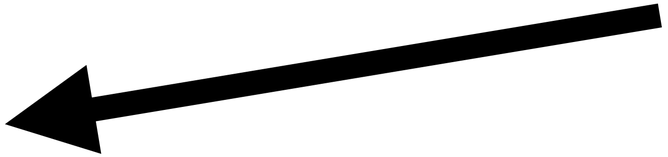
YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

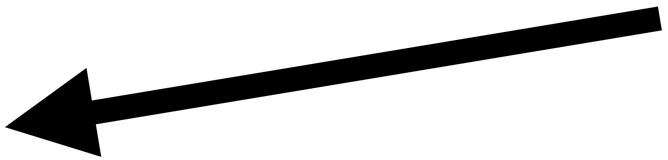


YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

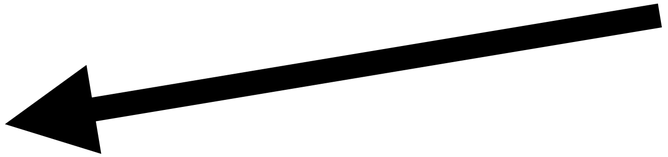
"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

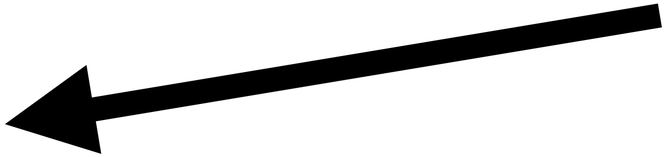
"I'm a handler for everything! I'll log something to the console and..."

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```



GET /puppies HTTP/1.1

"Are you a handler for GET /puppies"?

"I'm a handler for everything! I'll log something to the console and..."

...now I'm ready for you to go the next

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

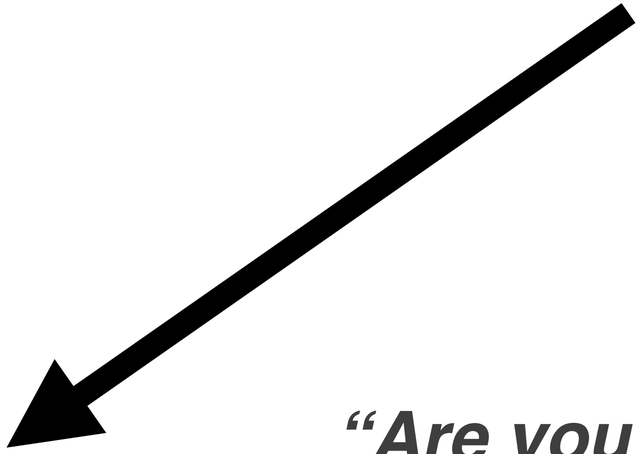
YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1



"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

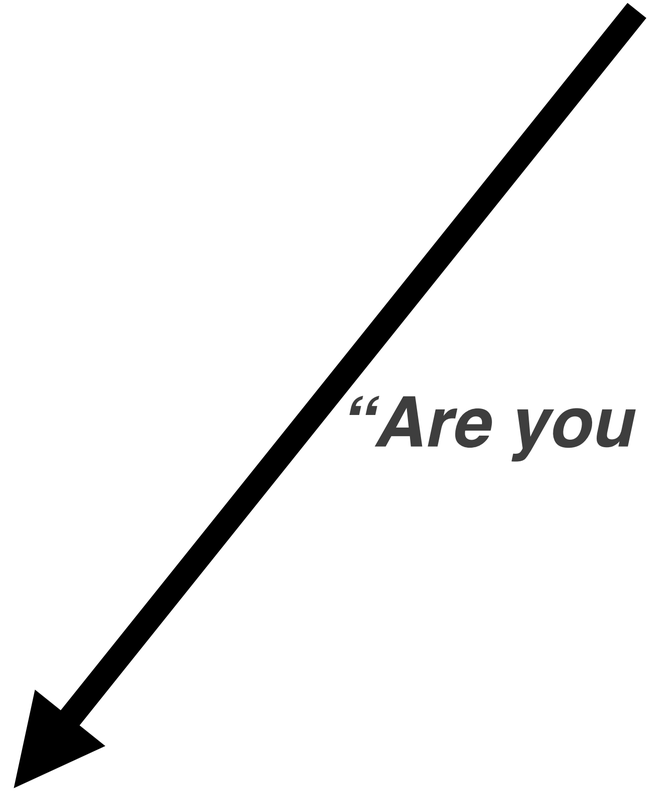
YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1



"Are you a handler for GET /puppies"?

YOUR EXPRESS APP

```
app.get('*')
```

```
app.get('/')
```

```
app.get('/puppies')
```

GET /puppies HTTP/1.1

HTTP/1.1 200 OK

Date: Wed, 03 Jan 2018 17:29:52 GMT

Connection: keep-alive

Transfer-Encoding: chunked

<h1>Welcome to the puppies page!</h1>

```
app.get('*', (req, res, next) => {
  console.log(req.method, req.url)
  next()
})

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})
```

```
app.use('*', (req, res, next) => {
  console.log(req.method, req.url)
  next()
})

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})
```

```
app.use((req, res, next) => {
  console.log(req.method, req.url)
  next()
})

app.get('/', (req, res, next) => {
  res.send(`<h1>Welcome to the main page</h1>`)
})

app.get('/puppies', (req, res, next) => {
  res.send(`<h1>Welcome to the puppies page</h1>`)
})
```

APP.GET

- Only for GET requests
- Exact match of verb and URL

APP.USE

- Handles all verbs
- Fuzzy match of url (we'll explore this more later)

EXPRESS MIDDLEWARE

EXPRESS MIDDLEWARE

A function that handles responding to requests.

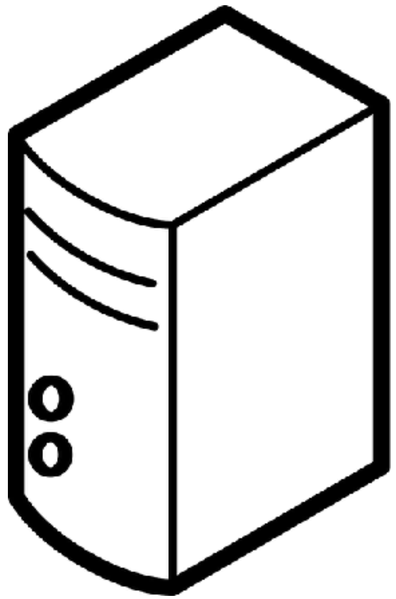
Of the form: `function(req, res, next){…}`

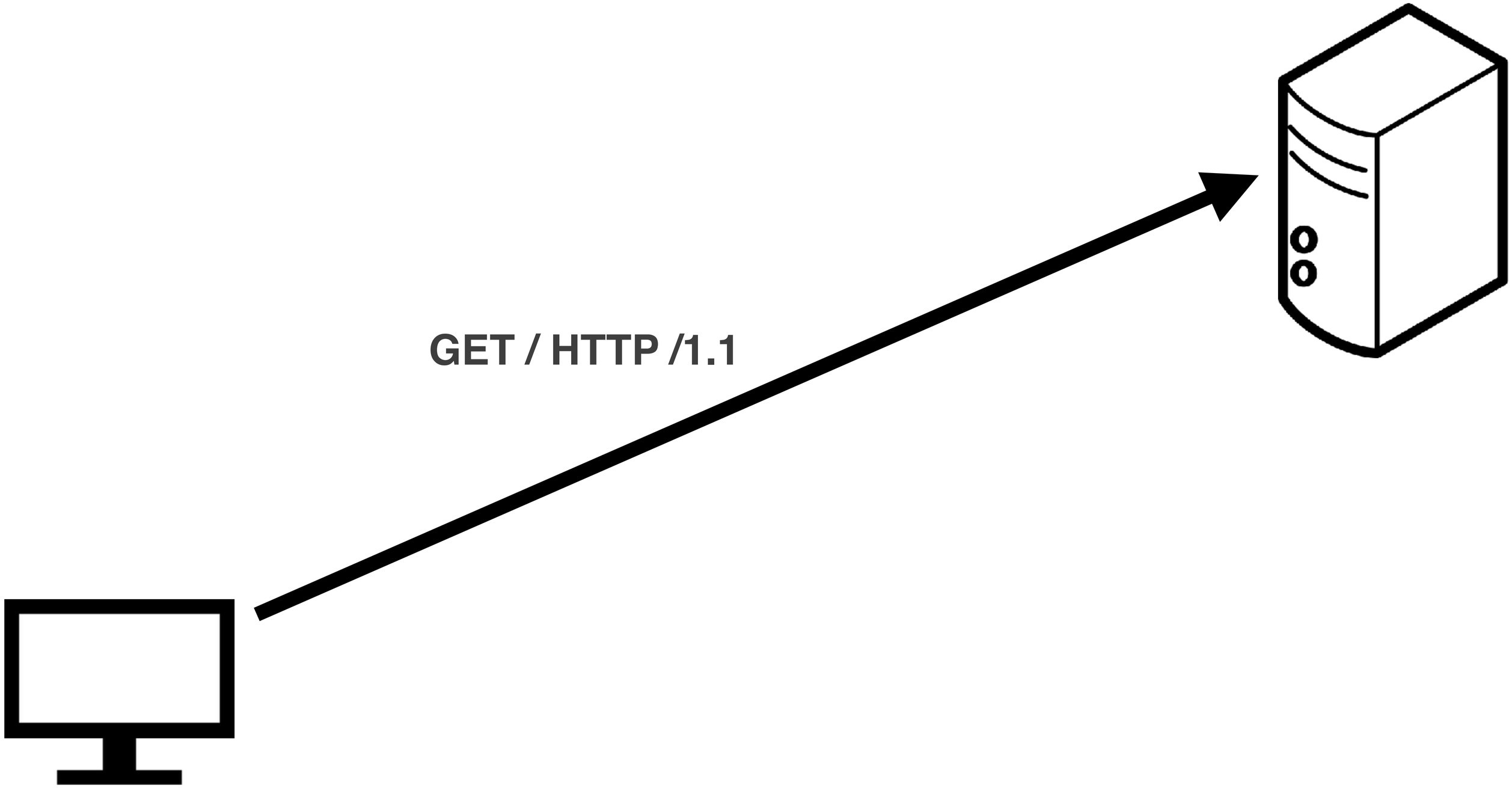
```
app.use((req, res, next) ⇒ {
  console.log(req.method, req.url)
  next()
})
```

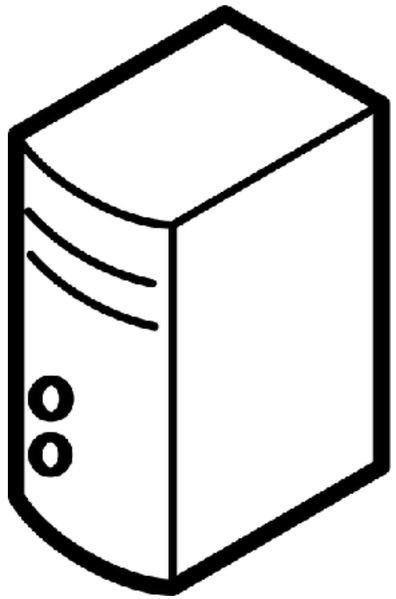
```
const morgan = require('morgan')

app.use(morgan('dev'))
```

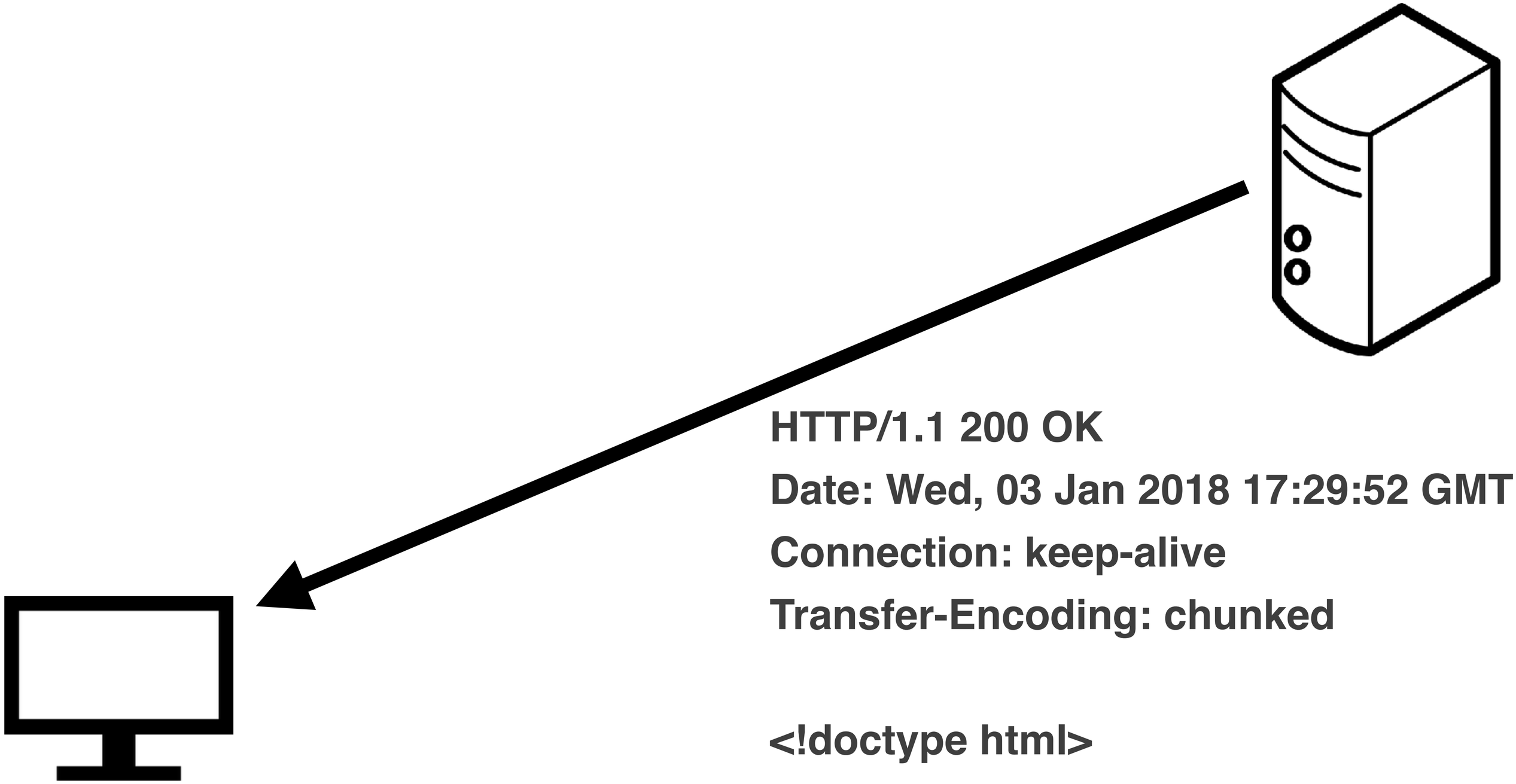
EXPRESS.STATIC

```
/server
  app.js
/public
  styleA.css
  styleB.css
  clientSideScript.js
```




GET / HTTP /1.1




HTTP/1.1 200 OK
Date: Wed, 03 Jan 2018 17:29:52 GMT
Connection: keep-alive
Transfer-Encoding: chunked
<!doctype html>

```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

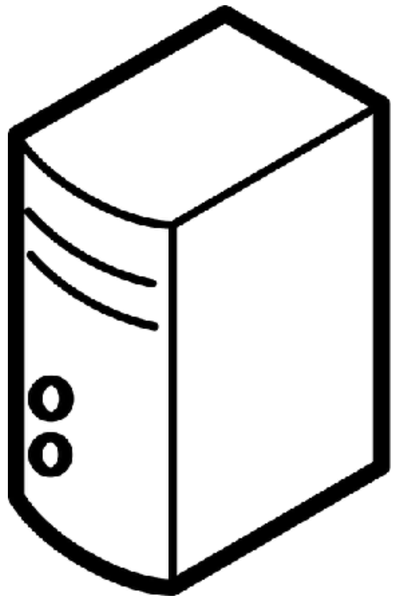
```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

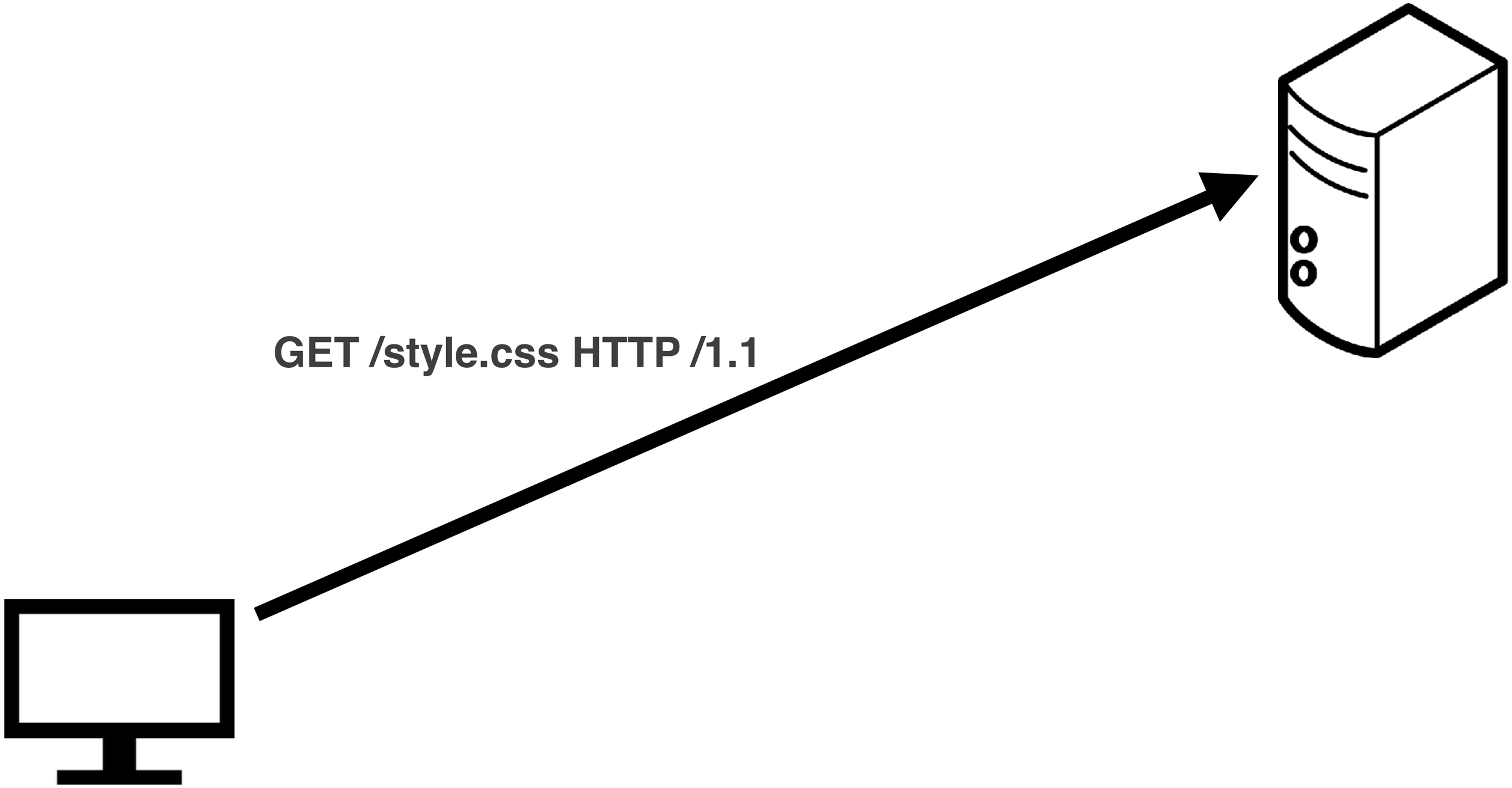
```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

```
<!doctype html>
  <head>
    <link rel="stylesheet" href="/style.css" />
  </head>
  <body>
  </body>
</html>
```

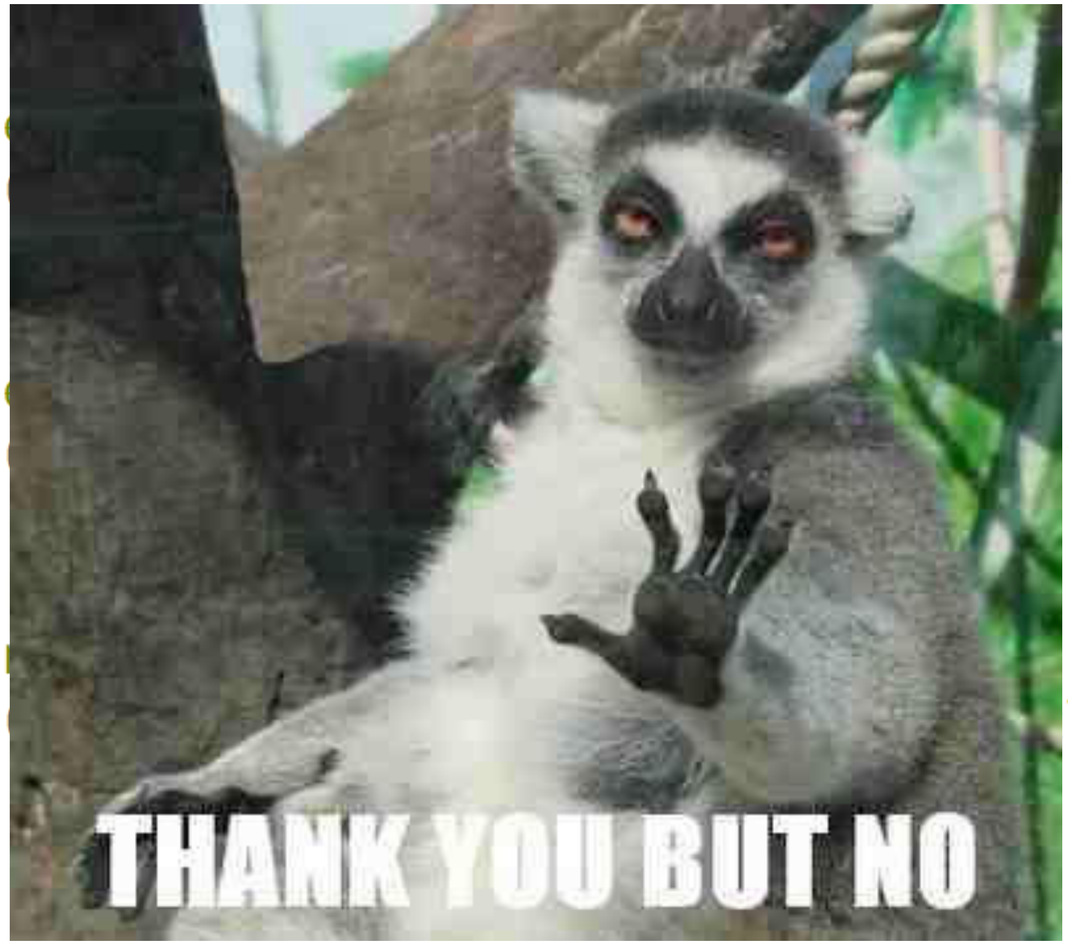



GET /style.css HTTP /1.1

```
app.get('/style.css', (req, res, next) => {
  res.sendFile(path.join(__dirname, 'public', 'style.css'))
})
```

```
app.get('/styleA.css', (req, res, next) ⇒ {
  res.sendFile(path.join(__dirname, 'public', 'styleA.css'))
})

app.get('/styleB.css', (req, res, next) ⇒ {
  res.sendFile(path.join(__dirname, 'public', 'styleB.css'))
})

app.get('/clientSideScript.js', (req, res, next) ⇒ {
  res.sendFile(path.join(__dirname, 'public', 'clientSideScript.js'))
})
```

```
app.get('/style
  res.sendFile(                                    tyleA.css'))
})

app.get('/style
  res.sendFile(                                    tyleB.css'))
})

app.get('/clie                                      ⇒ {
  res.sendFile(                                    lientSideScript.js'))
})
```



```
const staticMiddleware = express.static(path.join(__dirname, 'public'))
app.use(staticMiddleware)
```