CS 5410

Intro to Node.js Server

Overview

Browser

TCP Connection
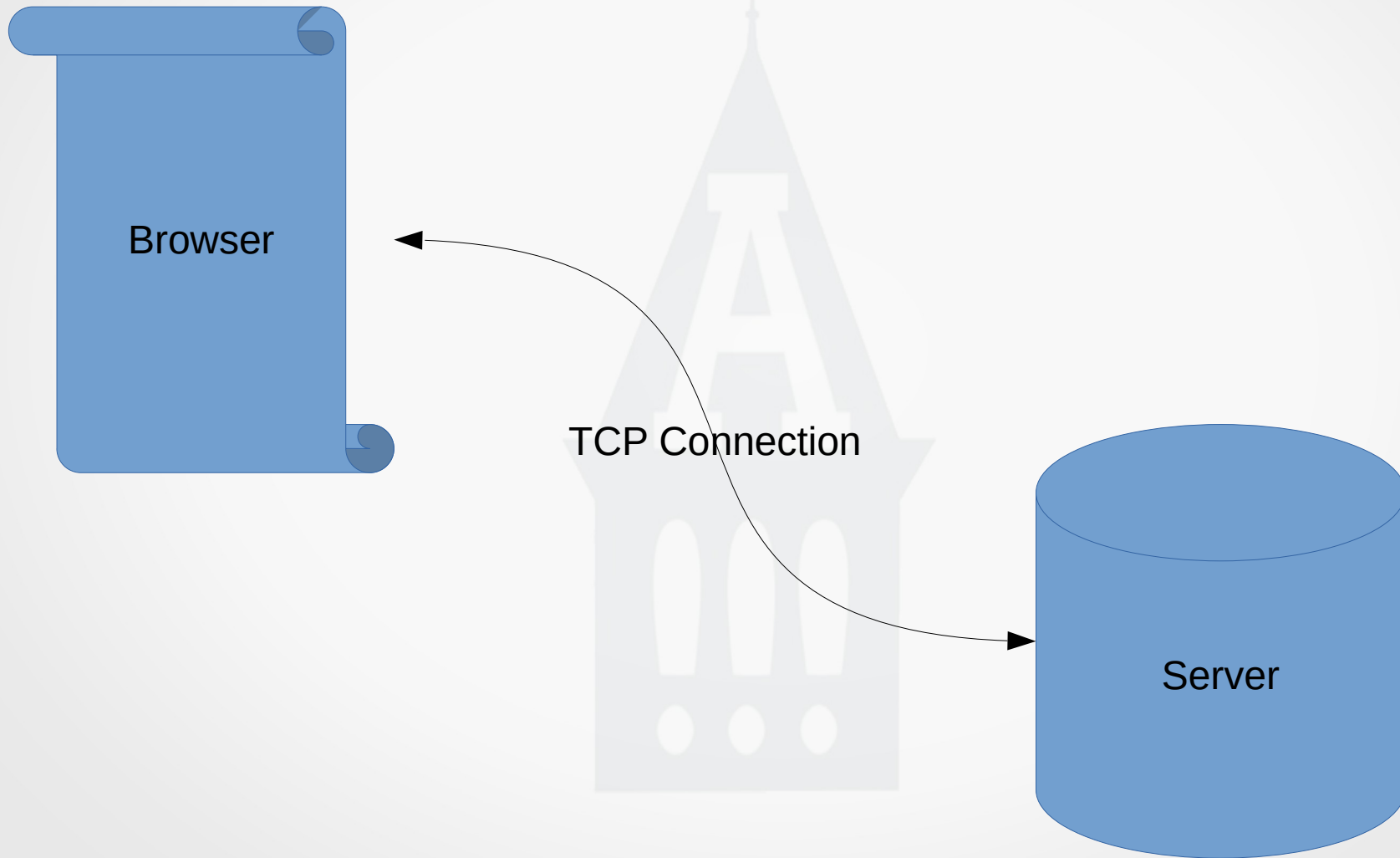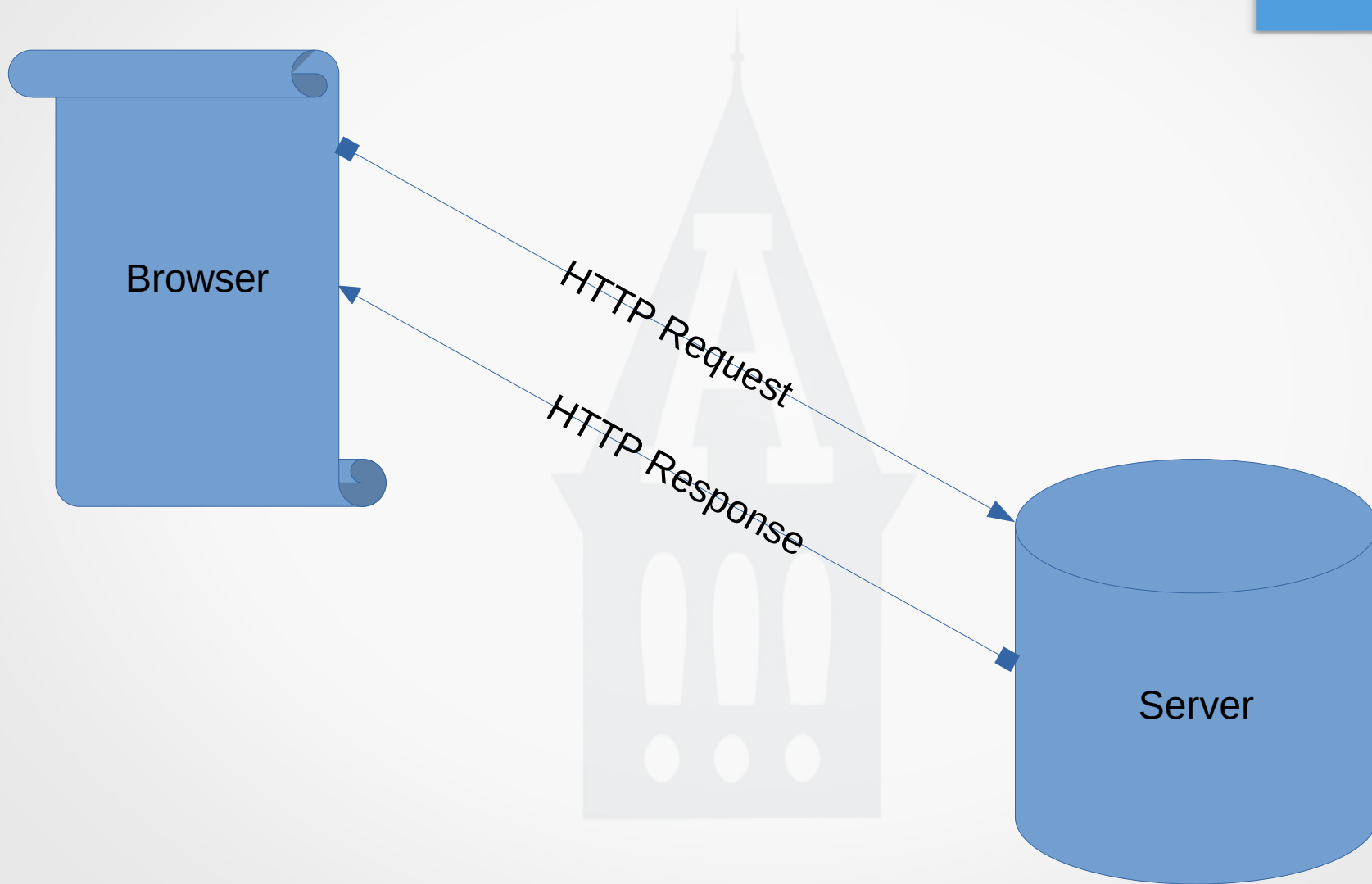
Server

Overview

HTTP Request/Response

Request

```
GET / HTTP/1.1
Host: usu.edu
Accept-Language: en-US,en; q-0.9
```

Response

```
HTTP/1.1 200 OK
Date: Tues, 05 Mar 2020 16:29:29 GMT
Server: nginx/1.15.7
Connection: keep-alive
Content-Length: 20929
Content-Type: text/html;charset=utf-8
```

HTTP Request/Response

Method

Path

Protocol/Version

```
GET / HTTP/1.1
Host: usu.edu
Accept-Language: en-US,en; q-0.9
```

Protocol/Version

Status code

Status message

```
HTTP/1.1 200 OK
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```

...simple server...

...simple server 2...

Serving Files

- Inspect the incoming request path
  - if '/', then send contents of index.html
  - otherwise, find the file and send its contents
    - If doesn't exist, report an error

- Request path : request.url

- decodeURI : because it might be (UTF) encoded
  - http://localhost:3000/%69%6e%64%65%78%2e%68%74%6d%6c
  - https://en.wikipedia.org/wiki/C%2B%2B14

- Use 'fs' to see if file exists and read the file contents

  UTF-8 Encoder/Decoder: https://www.browserling.com/tools/utf8-encode

Character Encoding

- (from w3) Essential Concepts

    - https://www.w3.org/International/articles/definitions-characters/

- Joel Splosky (Stack Overflow)

    - https://www.joelonsoftware.com/2003/10/08/the-absolute-minimum-every-software-developer-absolutely-positively-must-know-about-unicode-and-character-sets-no-excuses/

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