CS-297 PRESENTATION 2

Week of October 10

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Project Blog

Week 5: Oct 3rd, 2023

Notes for Week 5 go here.

Week 4: Sept 26th, 2023

Notes from professor:

- Try setting up using "other email client"
- Read about sendmail (daily problems). It's the simplified version of these
- Small project - convert your page to be shown using site's web server, 3 different routes for bio, blog, and proposal.
- Test the code on different machines to make sure it's working as shown.
**Binary Format of GET Request**

| +-----------------------------------------------+                             |
| |                  Length (24 bits)                 |                             |
| +-----------------------------------------------+                             |
| |          Type (8 bits) | Flags (8 bits).    |                             |
| +-----------------------------------------------+                             |
| |R|        Stream Identifier (31 bits)     |                             |
| +-----------------------------------------------+                             |
| |     Frame Payload (variable length) |                             |
| +-----------------------------------------------+                             |

Application layer (HTTP/2)

Binary framing

Session layer (TLS)

Transport layer (TCP)

Network layer (IP)

Post /upload HTTP/1.1
Host www.example.org
Content-type:application/json
Content-length: 15
[
  "msg": "hello"
]

Data frame

Headers frame

---

Application layer (HTTP/2)

Session layer (TLS)

Transport layer (TCP)

Network layer (IP)
HTTP/2 Inside: binary

HTTP/2.0 request:
00 00 9D 01 25 00 00 00 01 00 00 00 00 B6 41 8A ...
90 B4 9D 7A A6 35 5E 57 21 E9 82 00 84 8A B9 58 D3 ...
z5W!
3F B5 61 09 1A 6D 47 87 53 03 2A 2F 2A 50 BE 9B ...
D9 AB FA 52 42 CB 40 D2 5F A5 11 21 27 51 8B 2D ...
4B 70 DD F4 5A BE FB 40 05 DE 7A DA D0 7F 66 A2 Kp.
81 B0 DA E0 53 FA D0 32 1A A4 9D 13 FD A9 92 A4 ...
96 B5 34 0C 8A 6A DC A7 E2 B1 04 41 04 4D FF 6A ...
43 5D 74 17 91 63 CC 64 B0 DB 2E AE CB 8A 7F 59 Cj
B1 EF D1 9F E9 4A 6D D4 AA 62 29 3A 9F FB 52 F4 ...
F6 1E 92 B0 D3 AB 81 71 36 17 97 02 9B 87 28 EC ...
33 0D B2 EA EC B9

HTTP/1.1 request:
GET / HTTP/1.1
Host: demo.nginx.com
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp;*/q=0.8
User-Agent: Chrome/47.0.2518.0