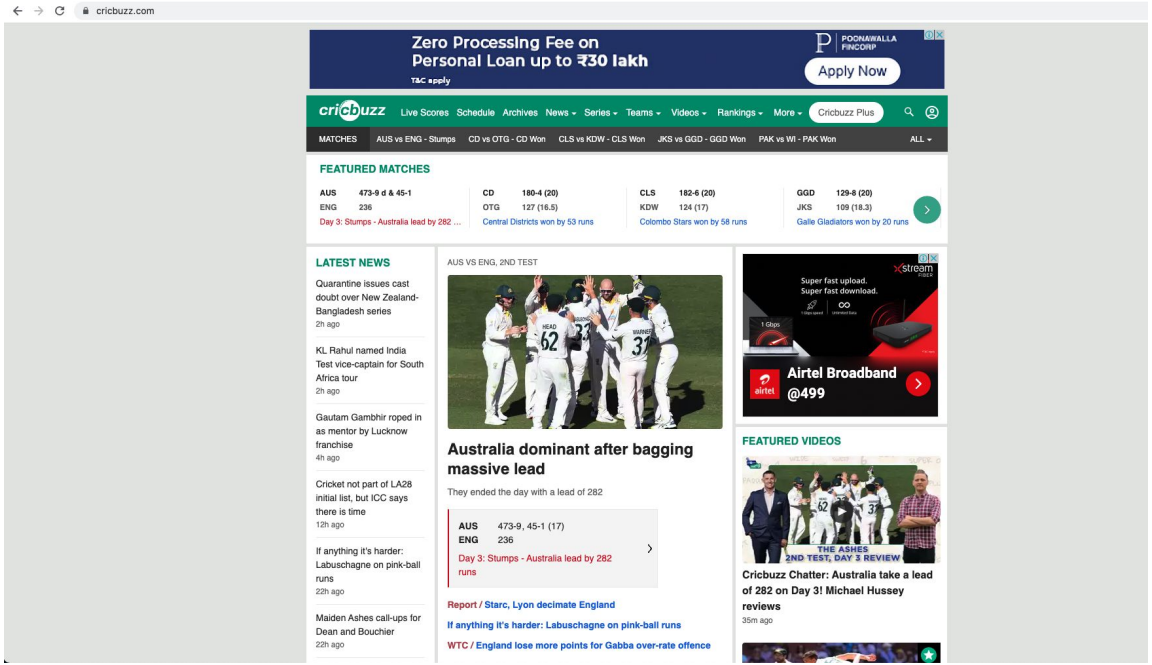
Setting up HTTP Server

Content

1. Client Server Architecture
2. HTTP & HTTPS
3. Setting up HTTP server
4. Postman

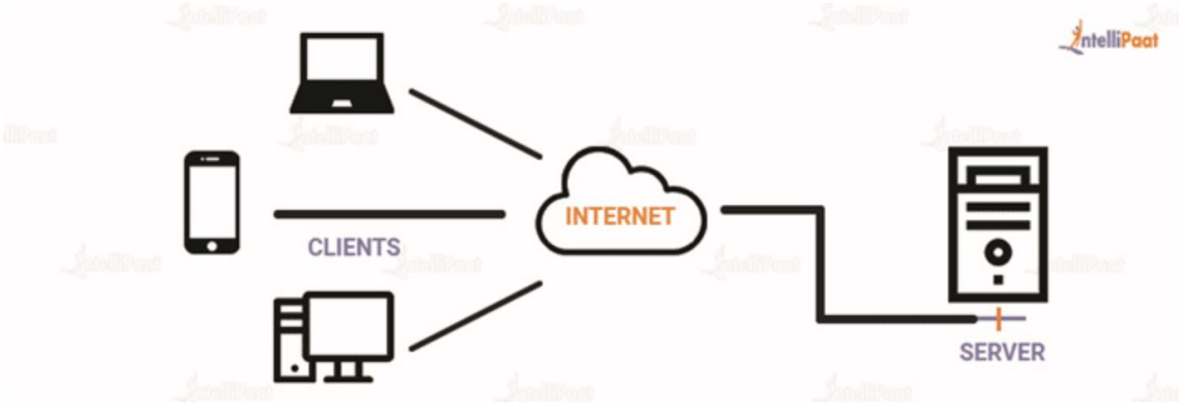
Ever wondered How you are able to view live score on internet ?



Backbone of all the interactions on internet is a simple architecture!

CLIENT-SERVER Architecture

Imagine Client as your interface and Server where the actual information resides



Client

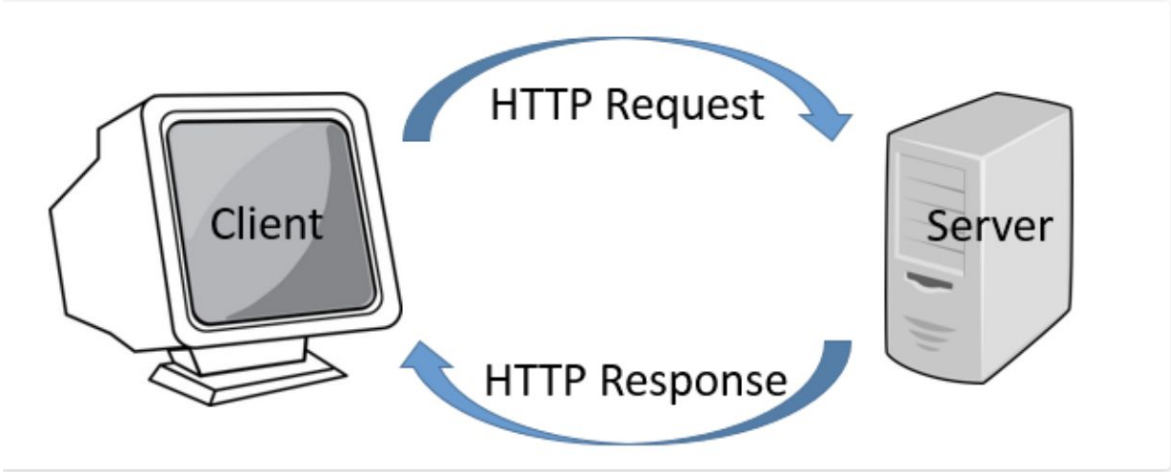
1. Requests Information
2. Depends upon server
3. Holds no additional resources

Server

1. Responsible for Hosting and managing resources which compute results for client
2. Abstracts out the implementation
3. Responds to whatever client asks for

How does the communication between Client and Server actually hap

HTTP to the rescue !!!!



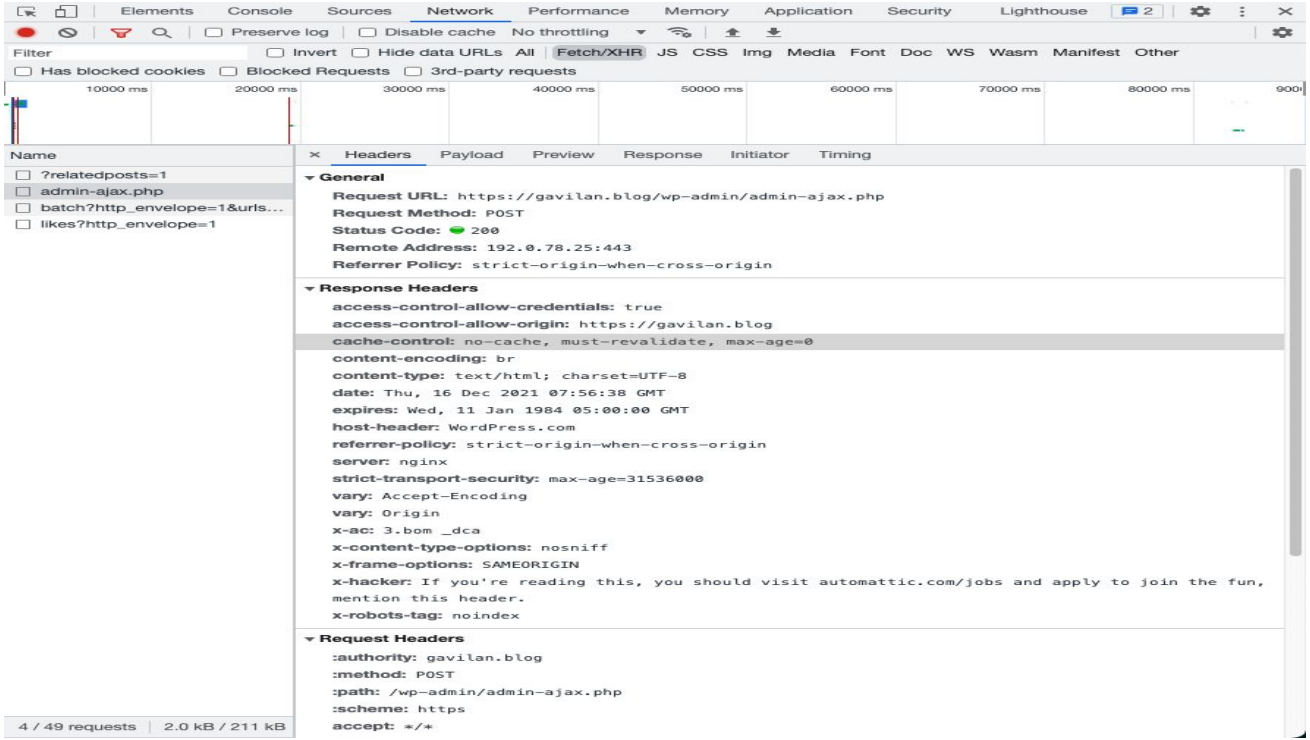
Types of HTTP Requests

1. GET
2. POST
3. PUT
4. DELETE
5. HEAD
6. TRACE
7. OPTIONS
8. PATCH

Sample HTTP Request

1. GET /test HTTP/1.1
   User-Agent: Mozilla/4.0 (compatible; MSIE5.01; Windows NT)
   Host: www.tutorialspoint.com
   Accept-Language: en-us
   Accept-Encoding: gzip, deflate
   Connection: Keep-Alive

HTTP Response



HTTP Response codes

1. 100's
2. 2. 200's
3. 3. 300's
4. 4. 400's
5. 5. 500's

GET VS POST METHOD

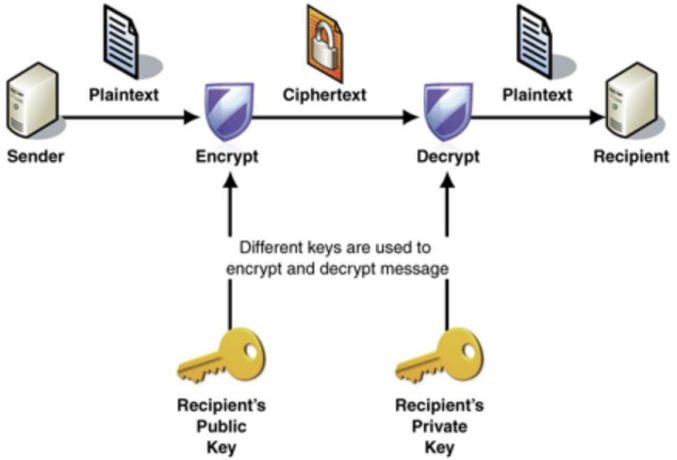
Discuss

1. Reloading
2. Bookmarking
3. Caching
4. Security
5. Size

Is HTTP Secure?

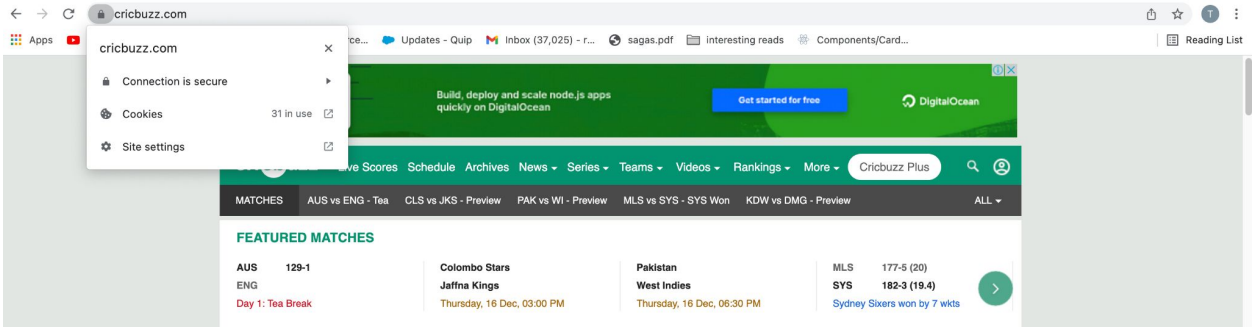
Intro to HTTPS (Hypertext Transfer Protocol Secure)

Encryption at work!!!



Example of asymmetric encryption system

Is your current web page Secure ?



REST (Representational state transfer)

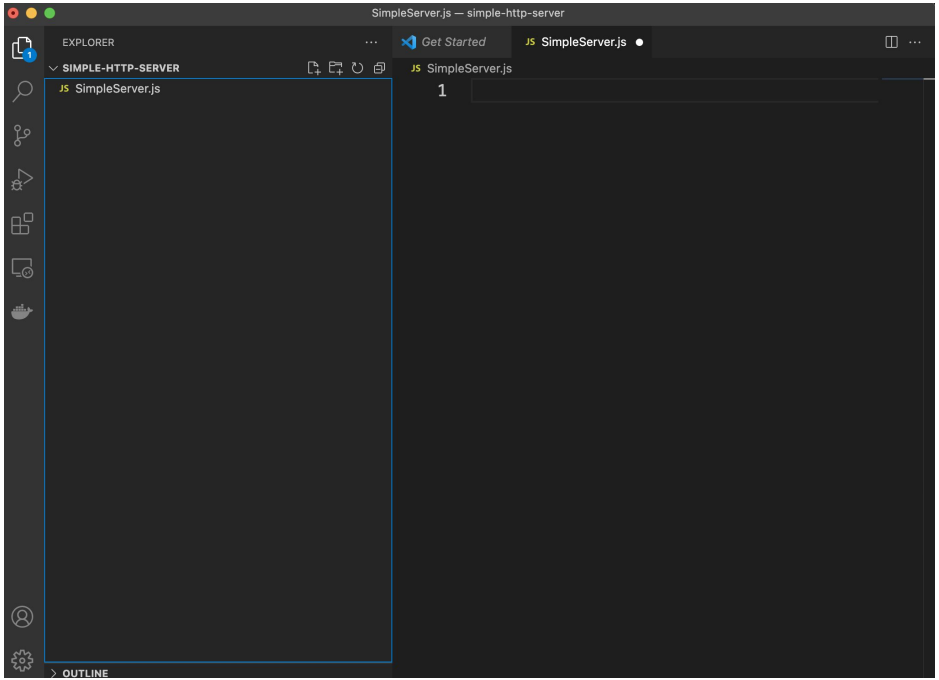
1. Client-Server architecture
2. Cacheability
3. Layered-System
4. Stateless
5. Uniform Interface

Lets Build our own HTTP Server Now!!!

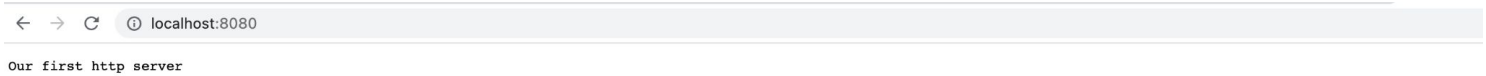
Pre-Req

- Code editor
- Git (Optional)
- Node js installed

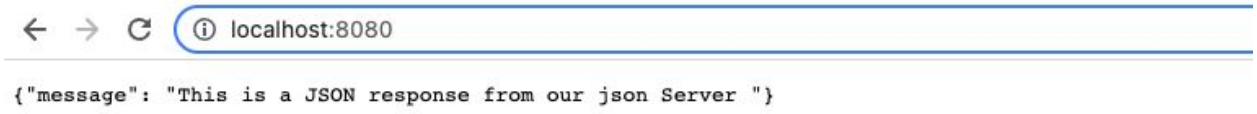
Set up Root directory



Create HTTP Server



Create HTTP Server with json response0



Create HTTP Server with CSV response

details

name	rollNumber	school
Tushar raina	34	Thapar

MCQs

1. If we have to update our password, what HTTP method should we use ?

A. GET
B. PUT
C. POST
D. UPDATE

Answer: B

2. If there is a Null pointer exception in server code, what response should it return?

A. 404
B. 302
C. 500
D. 201

Answer: C

3. Which of the following methods has no message body?

A. POST
B. GET
C. PUT
D. DELETE

Answer: B

4. Find incorrect mapping.

A. 200 OK

B. 400 Bad Request

C. 402 Not Found

D. 301 Moved Permanently

Answer: C

5. If we have to configure a RESTFull url, for searching a book given its id, what will the request look like.

A. GET /{id}/books/

B. GET /{Id}

C. GET /Books/{id}

D. GET /Books?id={id1}

Answer: C

Homework!

1. Let us change the port to 8448
2. Let us return error 400 error code

Thank You!