

Web terms

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HTTP and HTTPS

- Both are protocols that govern data transmission btw client and server
- HTTPS is a secure version of HTTP, and offers data encryption in both directions
- HTTPs = combination of HTTP and SSL/TLS
- HTTPS provides SSL Certificate to secure the communication between server and client.
- HTTP is faster
 - Reason: http pages are stored on computer and internet caches
- HTTPS sends data in scrambled form. At the reciever end, the data is descrambled again.

SSL

- Secure Sockets Layer
- SSL evolved into TLS
 - TLS = Transport Layer Security
- A website that implements SSL/TLS has "[HTTPS](#)" in its URL instead of "[HTTP](#)."
- SSL is a internet security protocol that ensures privacy, authentication and data integrity in data transmissions across the web.
- SSL :
 - Privacy: data is transmitted in encrypted form instead of plain text
 - Authentication: ensures that the two communicating devices are really who they claim to be
 - Data integrity: SSL digitally signs data before transmitting it. Then before the data reaches the reciever, it verifies that the data has not been tampered with

SSL certificates

- SSL can only be implemented by websites that have an [SSL certificate](#)
- An SSL certificate is like an ID card that proves someone is who they say they are

Levels of validation checks in SSL:

- Domain validation : verify that person applying for certificate is indeed the

owner of the domain name

- Organisation validation : verify owners identity
- Extended validation

Types of SSL certificates:

- Single domain
- Wild card
- Multi domain

NPM

Ref:

- https://www.w3schools.com/whatis/whatis_npm.asp
- <https://www.freecodecamp.org/news/what-is-npm-a-node-package-manager-tutorial-for-beginners/>
- Node Package Manager
 - The package manager for Node.js (like pip for python)
- It has 2 parts:
 - CLI : for pushing, pulling packages
 - Online repository that stores the JS packages