Presentation on Protocols

By

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WWW(World Wide Web)

- The **World Wide Web** is abbreviated as WWW and is commonly known as the web.
- The WWW was initiated by CERN (European library for Nuclear Research) in 1989.
- WWW can be defined as the collection of different websites around the world, containing different information shared via local servers(or computers).
- **Components of the Web:** There are 3 components of the web:
- **Uniform Resource Locator (URL):** serves as a system for resources on the web.
- **HyperText Transfer Protocol (HTTP):** specifies communication of browser and server.
- **Hyper Text Markup Language (HTML):** defines the structure, organisation and content of a webpage.

URL(Uniform Research Locator)

- A URL is a type of uniform resource identifier and is address of a resource on the World Wide Web and the protocol used to access it.

- It is used to indicate the location of a web resource to access the web pages.

- For example, to visit the javatpoint website, you will go to the URL www.pdpu.com, which is the URL for the [pdpuwebsite](#).

- It is only used for locating web pages.

- In URL, the scheme must be a protocol such as FTP, HTTP, HTPPS, and more.
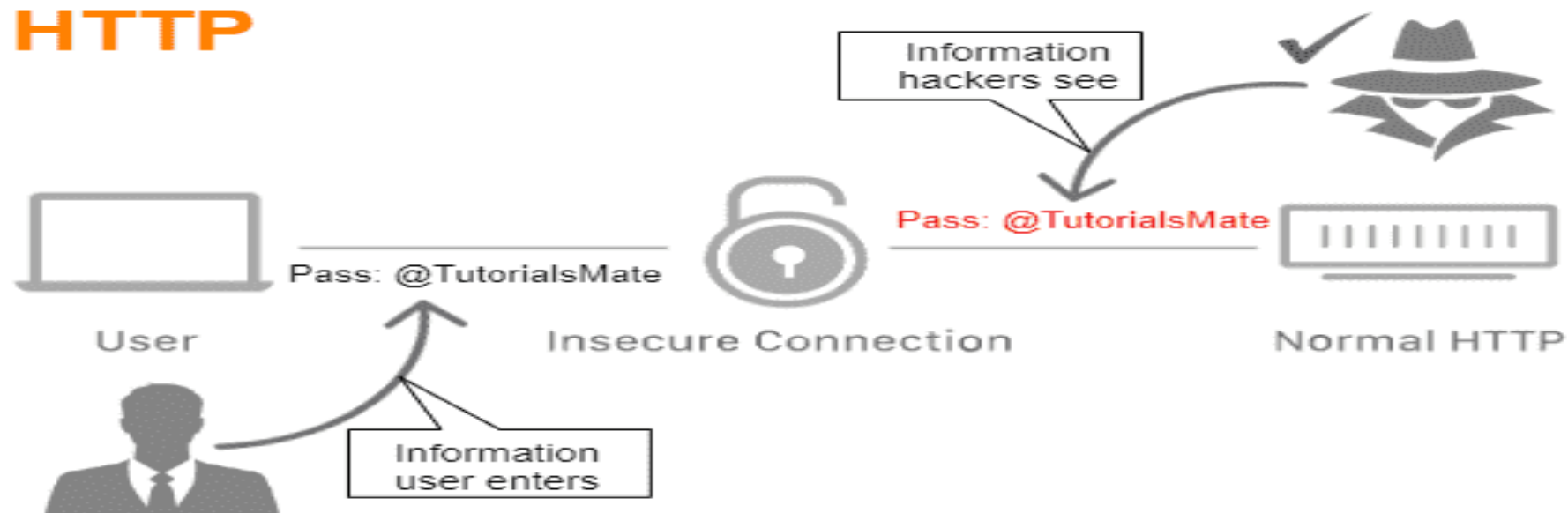
HTTP(Hyper Text Transfer Protocol)

- HTTP stands for **HyperText Transfer Protocol**.
- It is a protocol used to access the data on the World Wide Web (www).
- The HTTP protocol can be used to transfer the data in the form of plain text, hypertext, audio, video, and so on.
- This protocol is known as HyperText Transfer Protocol because of its efficiency that allows us to use in a hypertext environment where there are rapid jumps from one document to another document.
- The default port number is 80 , for communication.
- No encryption is present in HTTP websites.

HTTPS(Hyper text transfer protocol Secure)

- **HTTPS** is an abbreviation of **Hypertext Transfer Protocol Secure**. It is a secure extension or version of HTTP.

- This protocol is mainly used for providing security to the data sent between a website and the web browser.

- It is widely used on the internet and used for secure communications.

- This protocol uses the 443 port number for communicating the data.

- Both Encryption and decryption exist on HTTPS websites.

HTTP

Information hackers see

Pass: @TutorialsMate

Pass: @TutorialsMate

User

Insecure Connection

Normal HTTP

Information user enters

HTTPS

Information hackers see

Fw6T8UV81pQfyV81p

SSL Certificate

Pass: @TutorialsMate

User

Encrypted Connection

Secure HTTPS

Information user enters