**February 9 Notes:**

**REQUEST MESSAGES :**

**Options Request Message :** -Displays all the request commands that could be used on a specific file , or a general directory , you can do this by using the "\*" as a substitute to the area where the directory of the file should be .

**EXAMPLE :**

**Request Input :**

OPTIONS http://examplesite.com/pages/index.html HTTP/1.1

**Server Response (Part where the options are shown) :**

Access-Control-Request-Method: GET, PUT, POST, DELETE, OPTIONS

**Trace Request Message :**

-It sends a loop-back of the request message. It echoes back the received request message. Typically used for testing/diagnostics of the request/response chain.

**Connect Request Message :**

-It establishes the encryption tunnel by exchanging data and certificates until the tunnel is established, though after the tunnel has been made you will no longer be able to see the data passing through.

**Extension Methods :**

**Safe Methods :**

-A method that does not trigger any changes to the system/file being specified , These kinds of method is somewhat just like querying data from a database without altering the state of anything within it .

**Request messages that are Safe methods:**

-GET , HEAD , OPTIONS , TRACE

**Idempotent Method :**

-A request message that is done multiple times should result to the same result as the first one , even if you do this again and again , The result should not be changed.

**Request messages that are Safe methods:**

-GET , HEAD , PUT , DELETE

**Cacheable Method:**

-The response to a request message can be cached and be accessed faster at a future time .

**HTTP MESSAGE HEADERS :**

**General Header Fields :**

* **Cache-Control :** Used to determine if a request is cacheable.
* **Connection :** Used to control connections.
* **Date :** Date the request was made/done including the time.
* **Pragma :** Old header for cache control, connection, date.
* **Transfer-Encoding :** Describes how the message is organized.
* **Trailer :** Can be seen on the end for accessing.
* **Upgrade :** If the client asks if it could speak in higher protocols , then it switches to that.
* **Via :** If a request goes through a gateway then a "Via" tag will be attached to it.
* **Warning :** Indicates that there might be errors on the body.

**Request Header Fields :**

* **Accept :** The types of files it can handle will be displayed.

- **Accept Encoding :** The encoding type it accepts/prefers.

**-Accept Language :** The language it can use to display the resource.