* Features and functionality
  + Cache Control - allows a client or server to transmit a variety of directives in either requests or responses
  + Content media type specification
    - HTTP uses Internet Media Types [17] in the Content-Type (section 14.17) and Accept (section 14.1) header fields in order to provide open and extensible data typing and type negotiation.
  + Language and character set specification
    - "character set" - a method used with one or more tables to convert a sequence of octets into a sequence of characters.
  + Content / transfer coding
    - Content coding values indicate an encoding transformation that has been or can be applied to an entity. Primarily used to allow a document to be compressed or otherwise usefully transformed without losing the identity of its underlying media type and without loss of information.
    - Transfer-coding values are used to indicate an encoding transformation that has been, can be, or may need to be applied to an entity-body in order to ensure "safe transport" through the network.
  + Content negotiation - process of selecting the best representation for a given response when there are multiple representations available
  + Client-server protocol/negotiation
    - An HTTP/1.1 server MAY assume that a HTTP/1.1 client intends to maintain a persistent connection unless a Connection header including the connection-token "close" was sent in the request.
    - An HTTP/1.1 client MAY expect a connection to remain open, but would decide to keep it open based on whether the response from a server contains a Connection header with the connection-token close
    - Either the client or the server sends the close token in the Connection header, that request becomes the last one for the connection.
    - Clients and servers SHOULD NOT assume that a persistent connection is maintained for HTTP versions less than 1.1 unless it is explicitly signaled.
    - In order to remain persistent, all messages on the connection MUST have a self-defined message length
  + Persistent connection
    - Persistent connections provide a mechanism by which a client and a server can signal the close of a TCP connection. This signaling takes place using the Connection header field (section 14.10). Once a close has been signaled, the client MUST NOT send any more requests on that connection.
  + Request pipelining
    - Pipelining allows a client to make multiple requests without waiting for each response, allowing a single TCP connection to be used much more efficiently, with much lower elapsed time.
  + Authentication/authorization
    - Authorization field value consists of credentials containing the authentication information of the user agent for the realm of the resource being requested.
* HTTP Resource Addressing
  + URI(Uniform Resource Identifiers)
    - Uniform Resource Identifiers are simply formatted strings which identify--via name, location, or any other characteristic--a resource.
    - Uniform Resource Locators (URL)
    - Uniform Resource Names(URN)
* HTTP URL Components
  + Scheme (HTTP or HTTPS)
  + Authority
    - User information (deprecated)
    - Host - name of the machine
      * Domain name
      * DNS - Domain name system
    - Port Number
  + Path – document root – starts in “/”
    - Static – serve as is
    - Dynamic – scripts
  + Query – starts in a “?”
    - & separating parameters
  + Fragment identifier
    - Starts in a “#”