**HTTP Resource Addressing**

HTTP resources are identified using URIs

Parts:

* Scheme

Example: “http://”

* Authority

– user information

* host
* domain name

– resolved to an IP address using DNS

**DNS** (Domain Name System)

* port number
* Path

– resolved relative to the document root on the server

– may refer to a static or dynamic resource

* Query

– typically provided as *key = value*  pairs with ampersand (&) separators between key or value pairs

– may be URL – encoded

Example: “…?id=123&color=red&size=xl”

* Fragment Identifier

– separated from the preceding part by a hash (#) which provides direction to a secondary resource

Example: “…?id=1234#addr”

**HTTP Request Message**

* Request Line
* Method
* Request URI
* HTTP Protocol Version
* Message Header
* Empty Line
* Message Body

**HTTP Response Message**

**HTTP Request Method**

* Standard Methods
* Get – most commonly used HTTP method
* Head – use to retrieve metadata
* Post – typically used in submitting HTML form data
* Put – stores the enclosed entity
* Delete – removes the resource associated with the request URI
* Options – the request may be \*
* Trace – request a loopback