Hypertext Transfer Protocol (HTTP)

Web Pages

A web page consists of base HTML (HyperText Markup Language) file which may reference several objects, e.g.
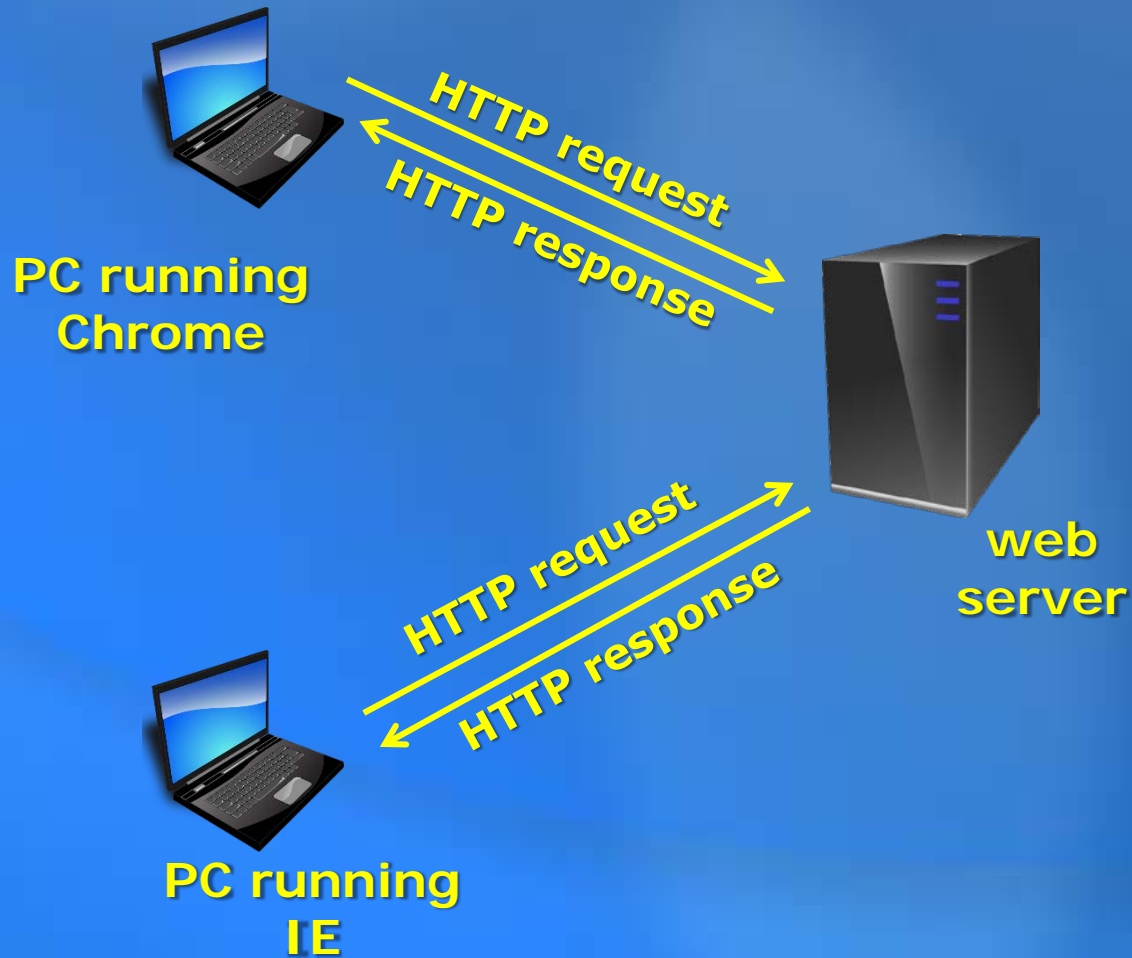
- a JPEG image
- an audio file
- a Java applet

Each object is addressable by a URL (Uniform Resource Locator):

www.ece.ust.hk/public/img/logo_ece.jpg

host name   path name

HTTP (HyperText Transfer Protocol)

**PC running
Chrome**

HTTP request

HTTP response

**web
server**

HTTP request

HTTP response

**PC running
IE**

**uses client-server model
communicates using TCP
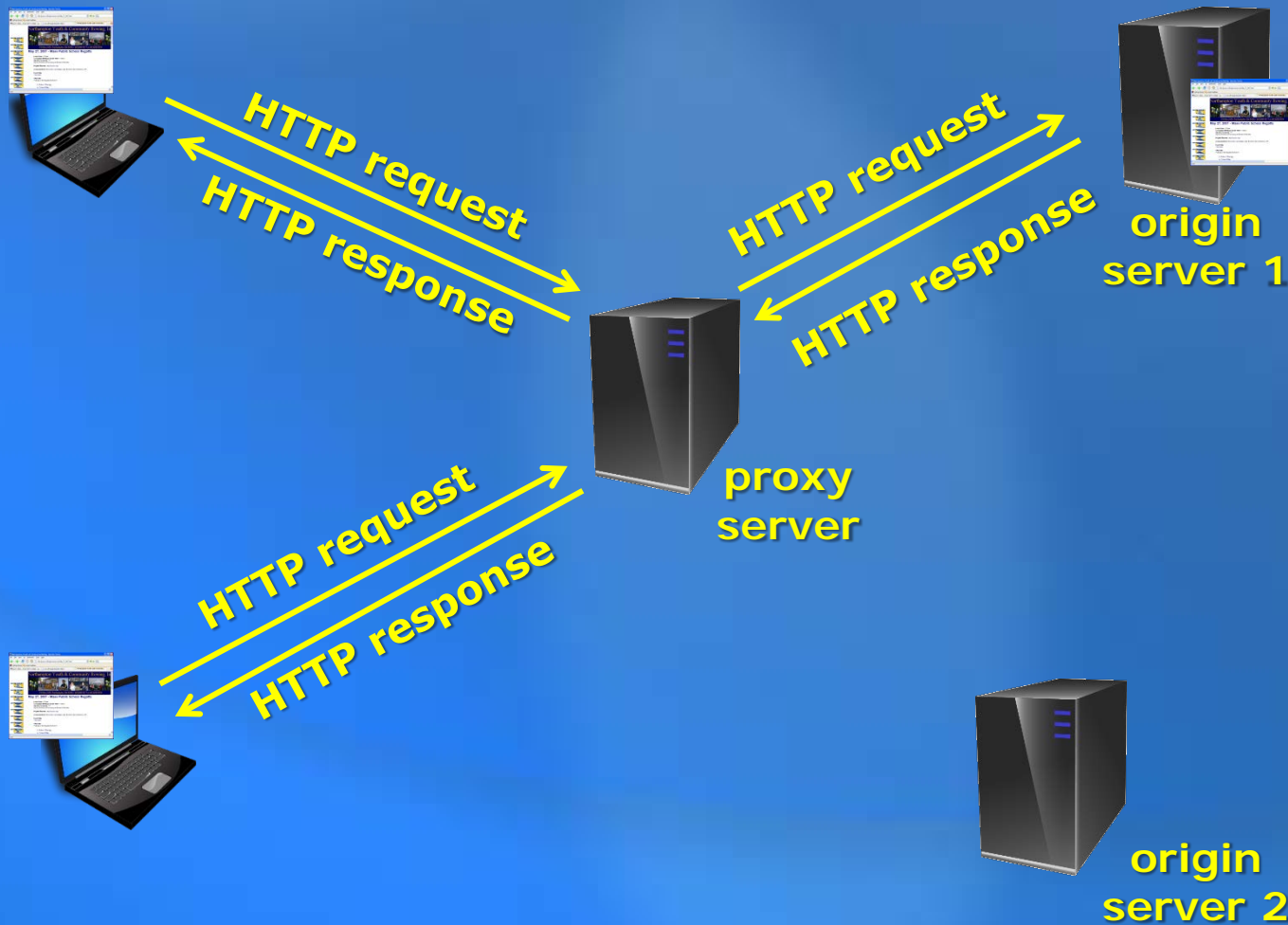(server port 80)**

server
- **holds html files and objects**
- **sends objects in response to
requests**

clients (browsers)
- **requests web pages and
associated objects from server**
- **uses base html file to determine
how to display objects**

Web caches

- **Goal: satisfy client request without involving origin server**
- **browser sends all HTTP requests to cache**
  - **if object in cache, cache returns object**
  - **else cache requests object from origin server, then returns object to client**