



Browser and Server Models

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CSE686 - Internet Programming

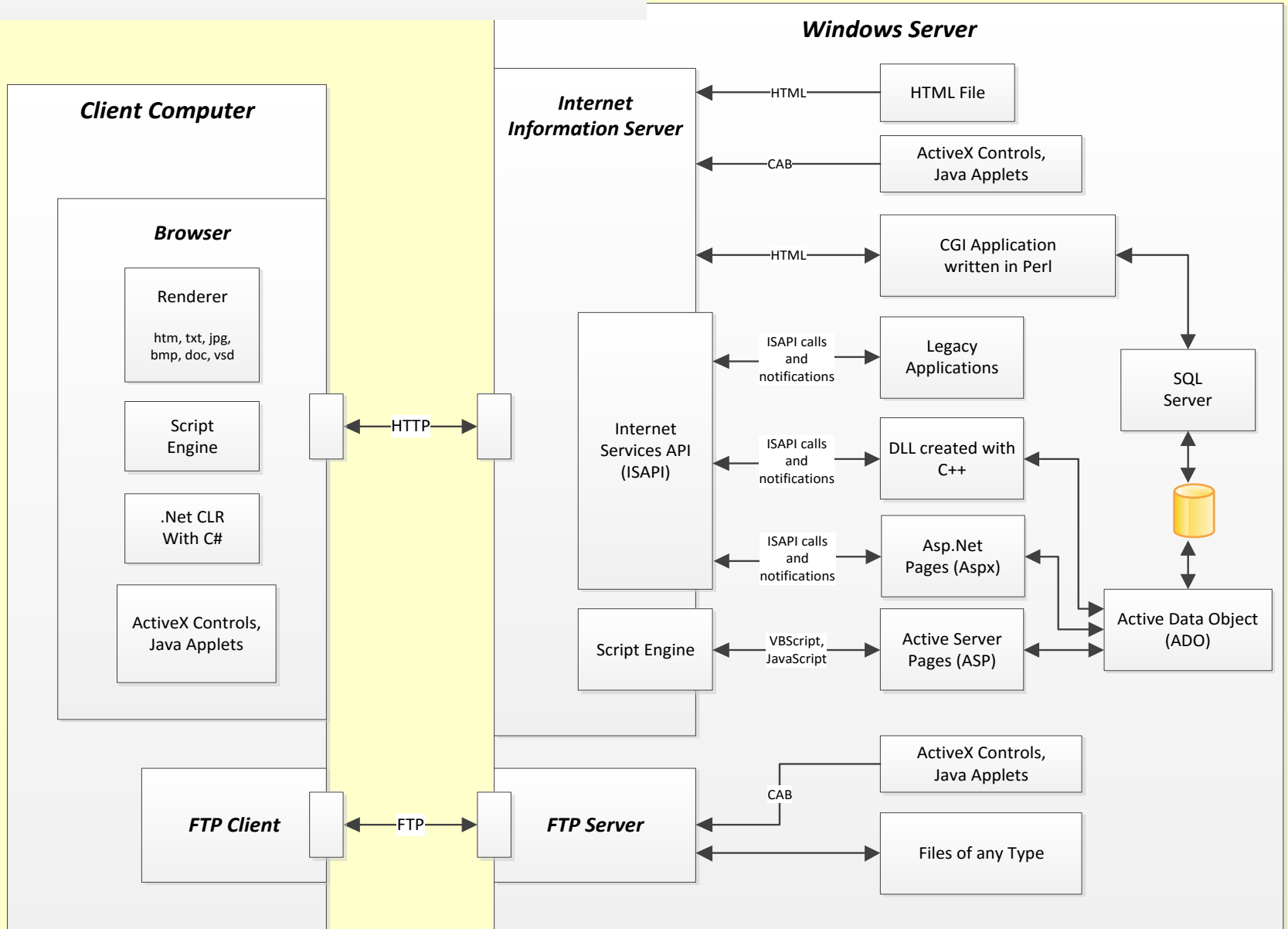
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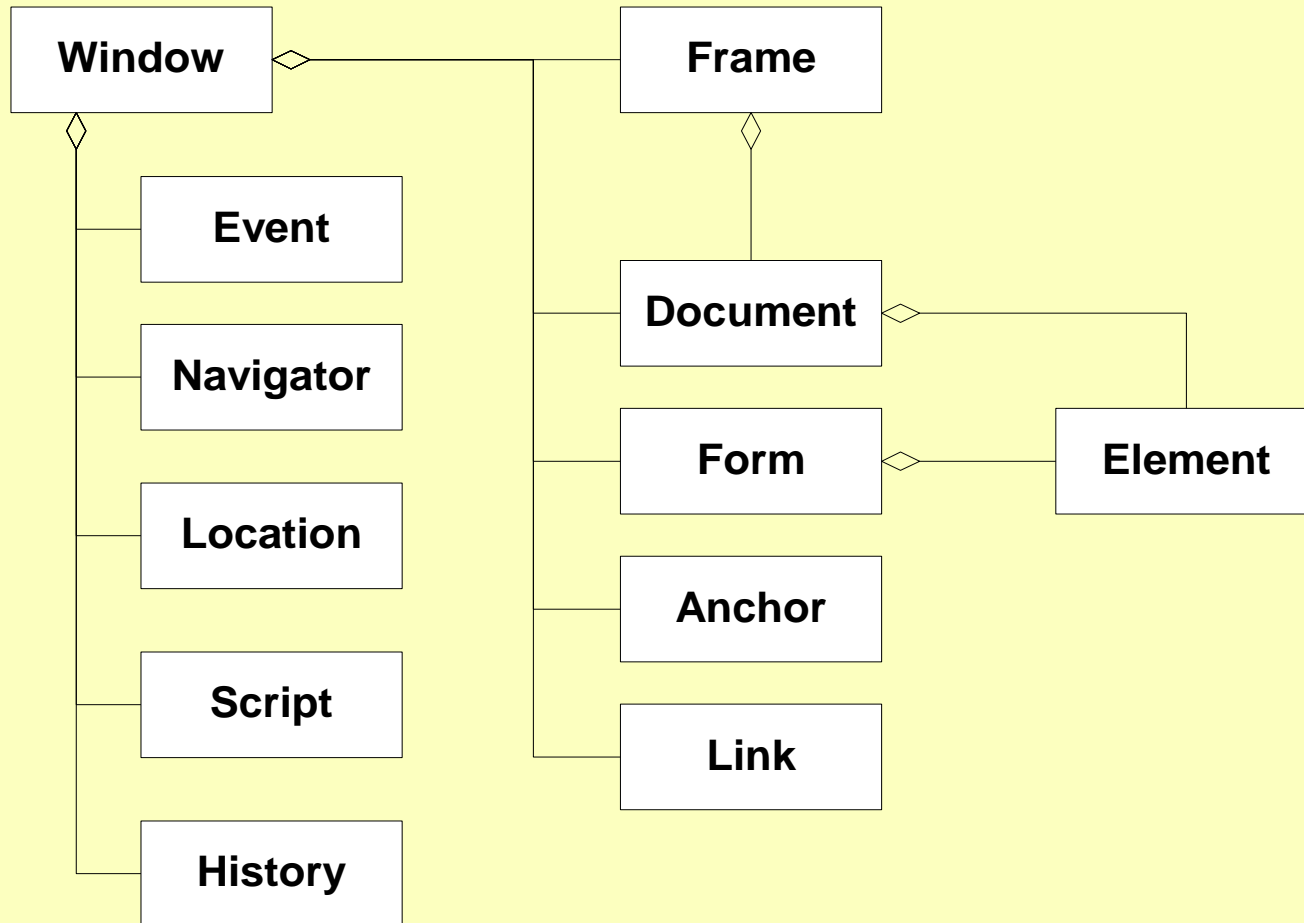
Topics

- Web Programming Model
- Browser Model
- Server Model

Client/Server - Current Web Model



Browser Object Model





Window Object

- Used to obtain information about:
 - the state of a browser window
 - the document in a window
 - Window events
- Summary
 - Properties: parent, screenLeft,
 - Methods: open, resizeBy, ...
 - Collections: frames
 - Events: onError, onLoad, ...
 - Objects: event, document, external, screen, ...
- Example: cse686/lecture2/DHTMLex1.htm



Event Object

- Event objects provide information about events on a web page.
- Summary
 - Properties: altKey, button, clientX, keyCode, ...
 - Methods: none
 - Collections: bookmarks, (data) boundElements
 - Events: none
- Example: cse686/lecture2/DHTMLex2.htm



Document Object

- Represents the HTML document in a browser window
- Summary
 - Properties: BGCOLOR, DIR
 - Methods: attachEvent, createElement, ...
 - Collections: all, children, images, ...
 - Events: onclick, ondrag, ...
- Example: cse686/lecture2/DHTMLex3.htm



Form Object

- Used to collect and display user information, validate input, and send data to a web server.
- Summary
 - Properties: action, firstChild, method, ...
 - Methods: submit, ...
 - Collectons: all, elements, ...
 - Events: onkeydown, onsubmit, ...
- Example: cse686/lecture2/DHTMLex4.htm

Server Object Model

**Application
Object**

**Request
Object**

**Response
Object**

**Server
Object**

**Session
Object**

**File Access
Component**

**Ad Rotator
Component**

**Browser Capabilities
Component**

**Content Linker
Component**

**Active Data Object
Component**



Application Object

- Share information between all users of your web site.
- Summary
 - Properties: None
 - Methods: Contents.Remove, Contents.RemoveAll, Lock, Unlock
 - Collections: Contents, StaticObjects
 - Events: OnEnd, OnStart



Request Object

- Retrieve information from the current user.
 - Access all information in the HTTP request.
 - Used to extract data from a form or URL parameters.
- Summary
 - Properties: Total bytes
 - Methods: BinaryRead
 - Collections: ClientCertificate, Cookies, Form, QueryString, ServerVariables
 - Events: None
- Example: see DHTMLex4.asp handout



Response Object

- Return information to the user's browser.
- Summary
 - Properties: Buffer, CacheControl, Charset, ContentType, Expires, ExpiresAbsolute, IsClientConnected, PICS, Status
 - Methods: AddHeader, AppendToLog, BinaryWrite, Clear, End, Flush, Redirect, Write
 - Collections: Cookies
 - Events: None
- Example: cse686/lecture2/ASPex1.asp
- Example: cse686/lecture2/ASPex2.asp



Server Object

- Determine server specific properties.
- Load ActiveX dlls
- Summary
 - Properties: ScriptTimeout
 - Methods: CreateObject, Execute, GetLastError, HTMLEncode, MapPath, Transfer, URLEncode
 - Events: None
- Example: cse686/lecture2/ASPex5.asp



Session Object

- Saves information about the current user as cookies on the client machine.
- Summary
 - Properties: CodePage, LCID, SessionID, Timeout
 - Methods: Abandon, Contents.Remove, Contents.RemoveAll
 - Collections: Contents, StaticObjects
 - Events: Session_OnEnd, Session_OnStart



Server Component Objects

- Dictionary Object
- FileSystemObject Object
- AdRotator Component
- Browser Capabilities Component
- Content Linking Component
- ActiveX Data Objects



Dictionary Object

- Create Dictionary Object
 - Set objDict = `_Server.CreateObject("Scripting.Dictionary")`
- Add item: `objDict.Add key, value`
 - `objDict.Add "Name" "Jim Fawcett"`
 - `objDict.Add "Employer" "Syracuse Univ"`
- Size: `objDict.Count`
- Item: `objDict.Item(key)`
- Example: cse686/lecture2/ASPex3.asp



FileSystemObject Object

- Create FileSystemObject:
 - Set objFile = _ Server.CreateObject("Scripting.FileSystemObject")
- List Drives:
 - For Each sDrive In objFile.Drives
Response.Write sDrive & " "
- Get Drive:
 - Set cDrive = objDrive.GetDrive("C")
- Get Root Folder:
 - Set cRoot = cDrive.RootFolder
- List Files:
 - For Each sFile In cRoot.Files
Response.Write sFile & "
"
- Example: <cse686/lecture2/ASPex4.asp>



End of Presentation
