Client-Side Storage
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Cookies

• The Web is stateless
• Cookies were invented by Netscape to add state
  – Allow, for example, session tracking and personalization
  – Does personalization (different views of same resource) break WebArch? i.e. compromise our ability to give URIs to things which can be distributed effectively?
• What are the properties of these two types of systems?
• Session cookies and persistent cookies
• Third-party cookies
• IETF drafts on cookies
Limitations of Cookies/New Requirements

• Cacheing and offline usage
• Access from multiple websites
• Management of personal storage -- pruning, query
• Large amounts of storage
• Control over what is transmitted with each request
Responses to These Requirements

• CORS and UMP
• Other means of making Cross Domain Requests
• Web Storage: http://dev.w3.org/html5/webstorage/
• Web Indexed DB: http://www.w3.org/TR/2010/WD-IndexedDB-20100819/
Bottom Line

• The new Client-side storage facilities enable new kinds of applications and extend web functionality. For example:
  – Copy all your mail and work on it offline
  – Make personal travel preferences available to several travel sites
  – Other applications using client-side storage
Question

• Do individual items in client-side storage require distinct URIs?
Concerns

• Cannot copy local storage from one device to another – e.g. from laptop to phone
• Cannot convert data available in other formats: SQL, CSV, XML to local storage and vice versa
• Cannot store my address book as local storage
• Privacy is a concern. If persistent storage is compromised it can have far-reaching consequences