

**CSE 4500 – Platform Computing**  
**Professor Lawrence Orijuela**  
**Homework 4 (Due midnight May 4)**

**Instructions:**

- 1. Download this assignment as an editable word doc from Canvas.**
- 2. Write your name and student ID.**
- 3. Write your answers in the spaces provided. Give yourself more space as needed.**
- 4. Export this doc with your name and answers as a PDF and resubmit it to canvas.**
  - a. Use this as your title: CSE4500\_YourName\_HW#**
  - b. Example: CSE4500\_BobSmith\_HW#1**

Name: Nathan Bush Student ID #: 007463099 Points:      /30

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1. What is the difference between localStorage and sessionStorage?  
Both localStorage and sessionStorage store data on the device running the web application. However, localStorage persists when the app is closed and stays on the device until the user explicitly erases it while sessionStorage is erased automatically when the app is closed.
2. How is localStorage better than cookies?  
localStorage has a much larger storage limit (5MB) than cookies. Data access is also faster and does not require bandwidth as it's already on the device, whereas cookies involve communication with the web server. Security is arguably better, with no user data flowing through the network and each website's localStorage is kept in an isolated area on the device.
3. How much localStorage is available for an app by default in most browsers?  
Each app gets 5MB of localStorage by default.
4. What are the advantages of localStorage versus server storage?  
localStorage has a much larger storage limit (5MB) than server storage. Data access is also faster and does not require bandwidth as it's already on the device, whereas server storage involves communication with the web server. Additionally, storing small amounts of data in localStorage for a web application with many users reduces the overhead on the web server having to store that data for every user and parse through it. Security is arguably better, with no user data flowing through the network and each website's localStorage is kept in an isolated area on the device.
5. What method allows you to save or modify the value of an object in localStorage?  
localStorage.setItem("<item>", "<value>")
6. What method allows you to retrieve the value of an object in localStorage?  
localStorage.getItem("<item>")