



LAB 6: Saving Data with Local storage and Sessions

In this lab, you will use the browser's session and local storage to store some information about the user for your site. You will learn:

1. How to use session storage to store temporary information.
2. How to use local storage to store more permanent information.

1. Let's get started. Create a web page with the jQuery Mobile aesthetic as you have done for previous labs.

```
1. <!DOCTYPE html>
2. <html>
3.   <head>
4.     <title>
5.       LAB 6
6.     </title>
7.     <meta name="viewport" content="width=device-width, initial-scale=1" />
8.     <!-- jQuery Mobile include tags go here -->
9.     <style>
10.      #footer{
11.        /* footer fixed to bottom */
12.      }
13.    </style>
14.  </head>
15.  <body>
16.    <div data-role="page">
17.      <div data-role="header">
18.        <h1>Storage</h1>
19.      </div>
20.      <div id="main" data-role="main" class="ui-content">
21.      </div> <!-- main -->
22.      <div data-role="footer" id="footer"><h1>Lab 6</h1></div>
```

```
23.   </div>
24. </body>
25. </html>
```

In order to demonstrate the use of session storage, let's create a feature to save the user's name to the session, and then retrieve it elsewhere.

2. Create an input to collect the user's name, and assign it an id of 'name_input'.

```
1. <div id="main" data-role="main" class="ui-content">
2.   <label for="">Enter your name in the field below.</label>
3.   <input type="text" name="name" id="name_input" placeholder="Your Name"></input>
4. </div>
```

3. Add a save button just beneath the name input. Give the save button an id of 'save_button'.

```
1. <div id="main" data-role="main" class="ui-content">
2.   <label for="">Enter your name in the field below.</label>
3.   <input type="text" name="name" id="name_input" placeholder="Your Name"></input>
4.   <a href="#" class="ui-btn" id="save_button">Save</a>
5. </div>
```

4. Add a script tag. Inside the script tag, write a 'window.onload' function.

```
1. <script>
2.   window.onload = function(){}
3. </script>
4. <style>
```

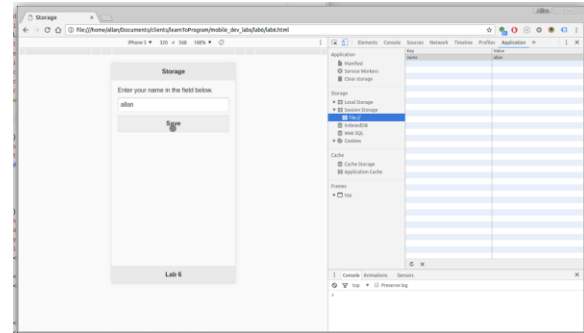
5. Inside the 'window.onload' function, create an event listener that is fired when the save button is clicked.

```
1. <script>
2.   window.onload = function(){
3.     document.getElementById("save_button").addEventListener("click", function(){});
4.   }
5. </script>
6. <style>
```

6. Inside the event listener function, get the value of the name input and save it to the 'name' key of the session storage.

```
1. <script>
2.   window.onload = function(){
3.     document.getElementById("save_button").addEventListener("click", function(){
4.       sessionStorage.name = document.getElementById('name_input').value;
5.     });
6.   }
7. </script>
8. <style>
```

7. To test out what you have so far, open up your HTML page in your browser. Navigate in the console to 'application' and open up the session storage table. In the text input, enter your name and click save. You should see an entry in the table with 'name' as the key, and the name you entered as the value.



Challenge yourself:

- Try storing several fields under the same key in local storage using a json string.

Next, let's make a feature that will use the information that you stored in the session storage.

8. Add a new button to show the user's name.

```
1. <a href="#" class="ui-btn" id="save_button">Save</a>
2. <a href="#" class="ui-btn" id="show_button">Show Name</a>
3. </div> <!-- main -->
```

9. At the top of the page, add a welcome message. This message will be modified when the 'show name' button is pressed.

```
1. <div id="main" data-role="main" class="ui-content">
2.   <h1 id="title">Welcome!</h1>
3.   <label for="">Enter your name in the field below.</label>
```

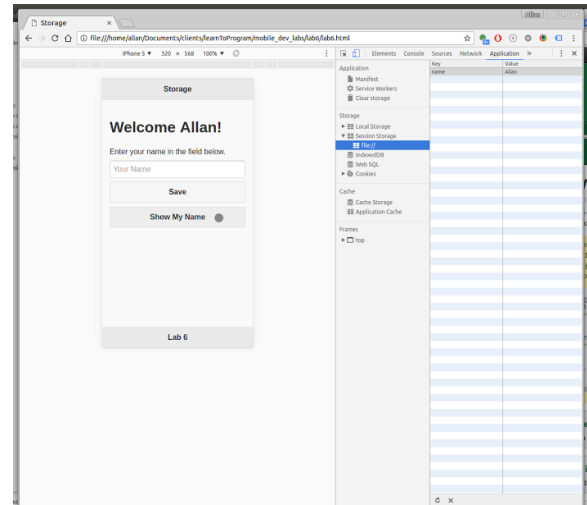
10. In the 'window.onload' function, create an event listener that fires when the 'show name' button is pressed.

```
1. document.getElementById("show_button")
   .addEventListener("click",function
   ()){
2.     }
3. </script>
```

11. In the event listener for the 'show name' button, write an if statement to check if the name is available in session store. If the name is available, retrieve the user's name from session storage and change the h1 'title' tag so that the message greets the user by name.

```
1. document.getElementById("show_button")
   .addEventListener("click",function
   (){
2.     if (sessionStorage.name){
3.         document.getElementById(
   'title').innerHTML = "Welcome " + se
   ssionStorage.name + "!";
4.     }
5.     });
6. }
7. </script>
```

12. In your browser, save your name to the session using the save button and click show name. You should now see your name in the welcome message at the top of the screen.



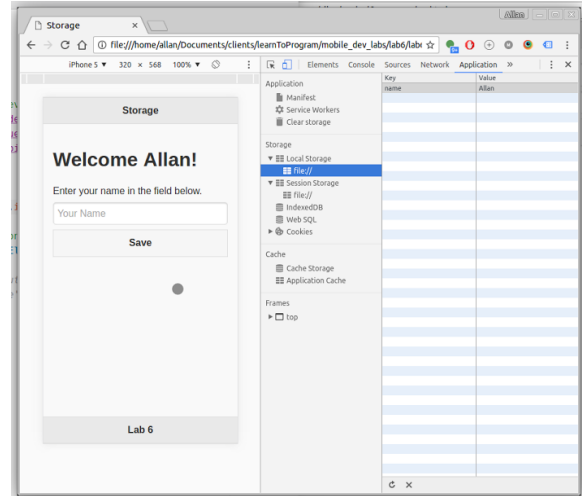
At this point, if you close the page and reopen it, the welcome message will not show the user's name when the 'show name' button is pressed. This is because the session information goes away as soon as the browser is closed. To persist the information for a longer period of time, you can use local storage.

13. In the event listener for the save button, change the code to save the user's name to local storage instead of session storage.

```
1. <script>
2.     window.onload = function(){
3.         document.getElementById("sav
   e_button").addEventListener("click",
   function(){
4.             localStorage.name = docume
   nt.getElementById('name_input').valu
   e
5.         });
6.     }
7. </script>
8. <style>
```

14. At the beginning of the 'window.onload' function, write an if statement to check if the user's name is available from the local storage. If the name is available from local storage, change the text of the 'title' header to greet the user by name.

```
1. <script >
2.   window.onload = function(){
3.     if (localStorage.name){
4.       document.getElementById('t
       itle').innerHTML = "Welcome " + loca
       lStorage.name + "!";
5.     }
```



15. You can comment out the 'show name' button now, since it is no longer needed.

```
1. <a href="#" class="ui-
   btn" id="save_button">Save</a>
2. <!-- <a href="#" class="ui-
   btn" id="show_button">Show Name</a>
   -->
3. </div> <!-- main -->
```

16. Open your HTML page in a browser, enter in your name, and click save. This will now save the name to local storage. Now when you close and reopen your browser, you should see the user's name included in the greeting message.