

# Lab Activity: Web Storage App

## Introduction

In this lab, you need to download the project skeleton from the course canvas, which contains some implementation already coded. Use this skeleton to implement the necessary Web Storage commands to make the application run as expected.

## Running the skeleton as it is

Run your skeleton in the VS Code environment. You should see a page as shown in Figure 1. Also, please open the “inspect” area and go to the Application Tab. In there, keep an eye on the local storage area, what should be empty at this point. If not empty, please right click on the local storage and clear this storage.

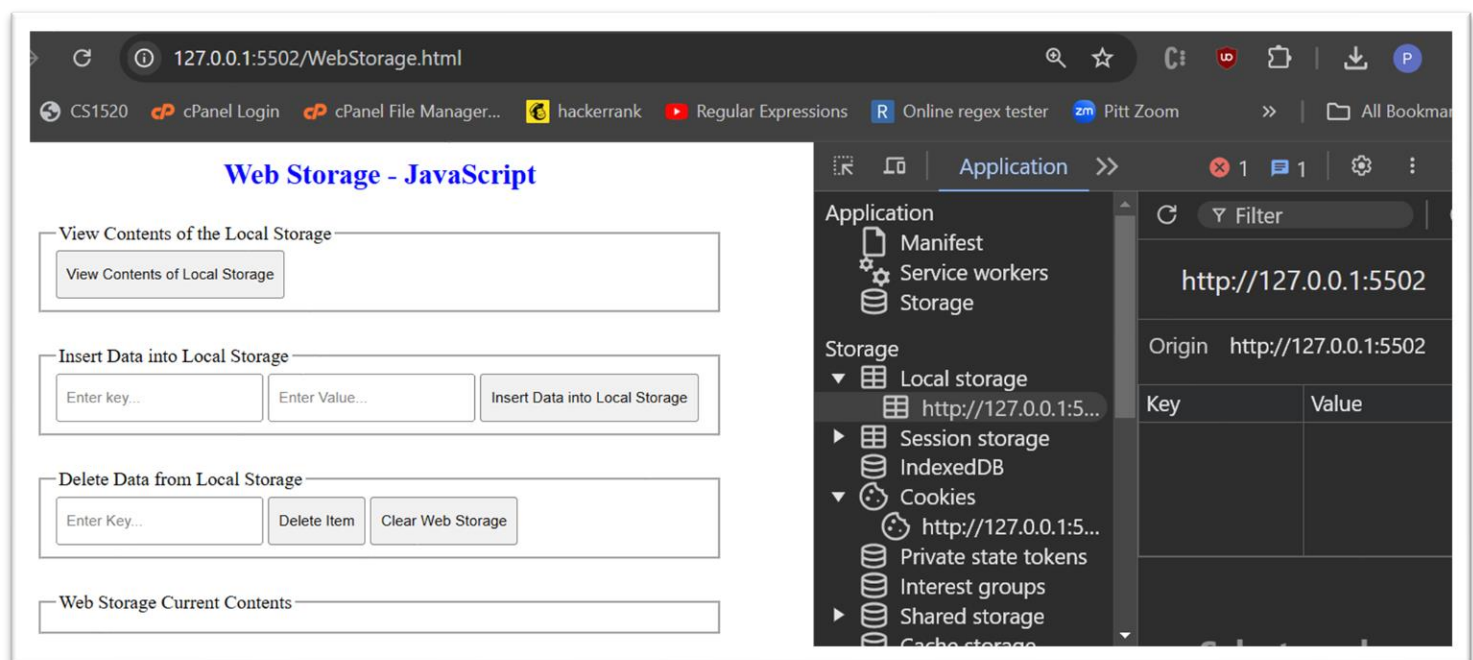


Figure 1

## Adding data into Local Storage

In the JavaScript file, track down which function is called by the event listener associated with the “Insert Data into Local Storage” button. Add code to read the key and value text input fields and then storage these fields into the local storage. Test your code with key=“Banana” and value=“1 dozen”, as shown in Figure 2. Check if this information has been added in the local storage, as shown in Figure 3.

### Web Storage - JavaScript

View Contents of the Local Storage

View Contents of Local Storage

Insert Data into Local Storage

Insert Data into Local Storage

Delete Data from Local Storage

Delete Item

Clear Web Storage

Web Storage Current Contents

Figure 2

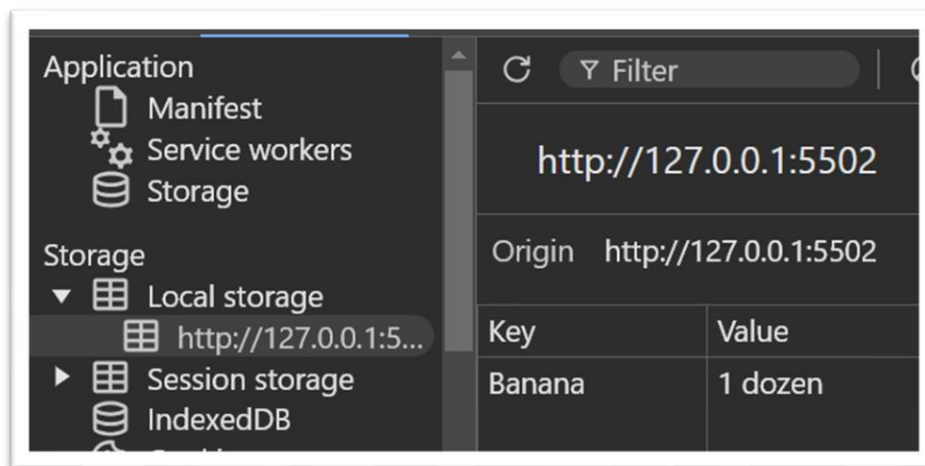
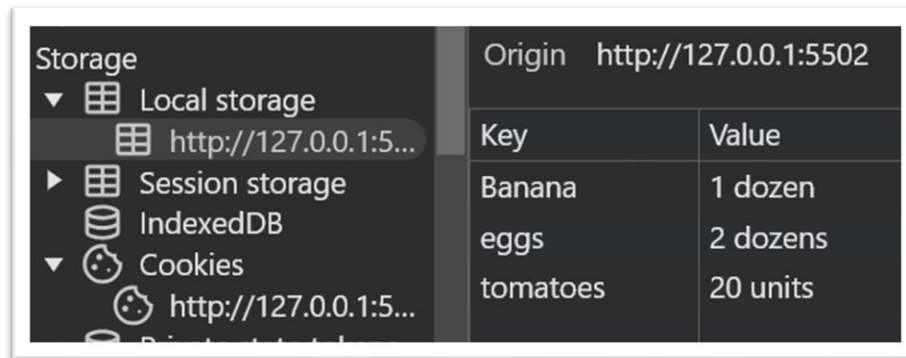


Figure 3

## Adding more data into the local storage

Add at least two more pairs of (key, value) into your local storage. Check your local storage to confirm that they have been added (Figure 4).



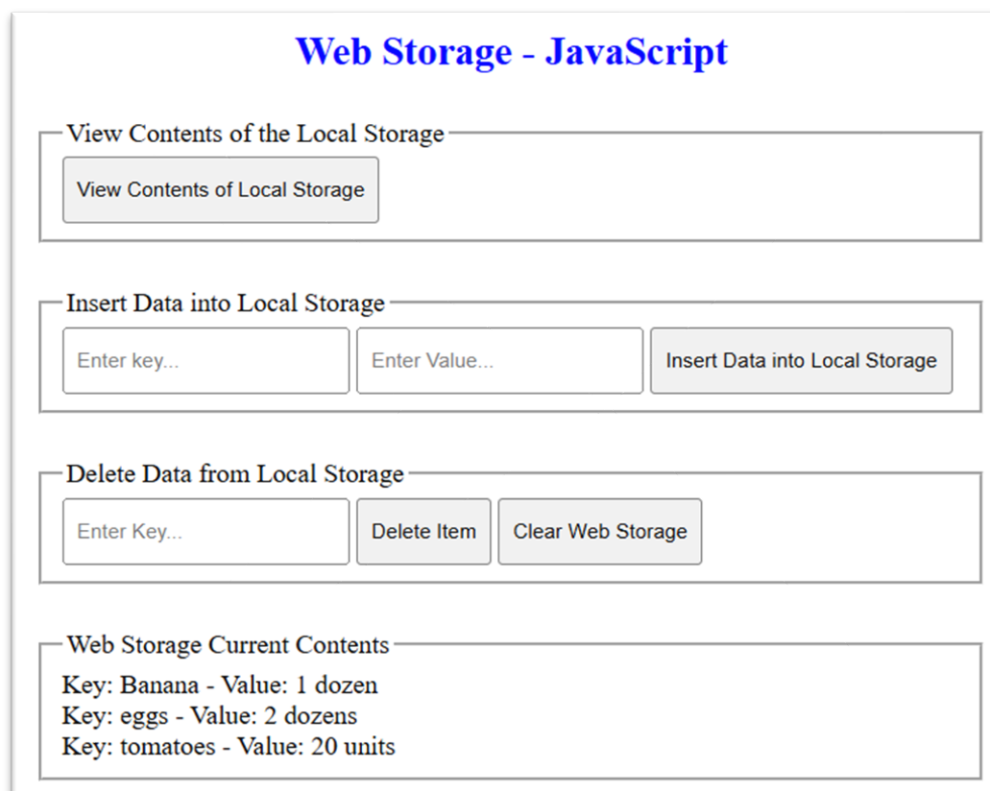
The screenshot shows the browser's developer tools with the 'Storage' tab selected. Under 'Local storage', the origin 'http://127.0.0.1:5502' is highlighted. To the right, a table lists the stored data:

Key	Value
Banana	1 dozen
eggs	2 dozens
tomatoes	20 units

Figure 4

## Listing the data saved in the local storage

In the JavaScript file, track down which function is called by the event listener associated with the “View Contents of Local Storage” button. Add code to read all pairs of (key, value) from the storage and then lists them in the output screen as shown in Figure 5.



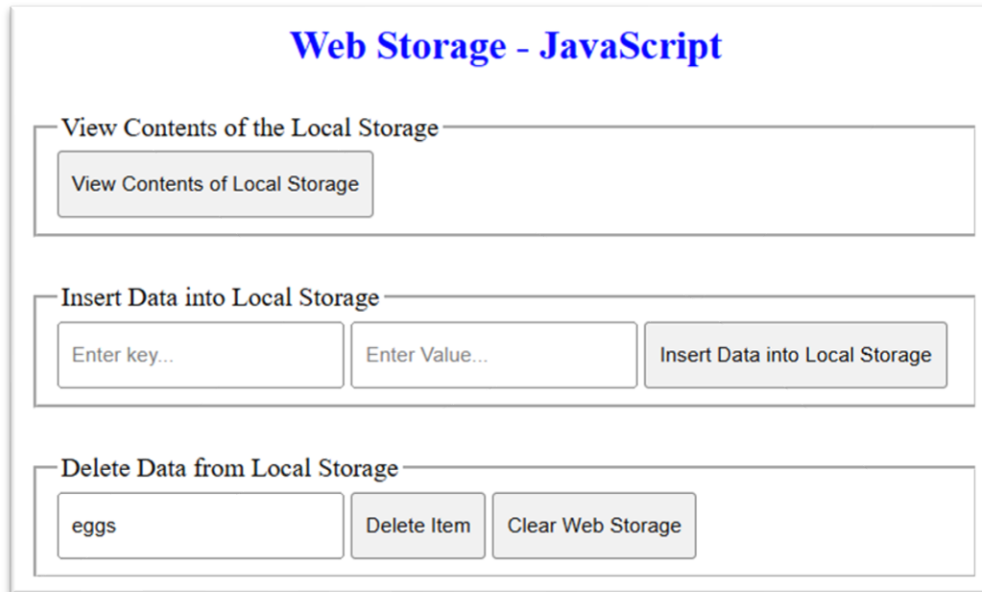
The screenshot shows a web application titled "Web Storage - JavaScript" with four main sections:

- View Contents of the Local Storage**: Contains a button labeled "View Contents of Local Storage".
- Insert Data into Local Storage**: Contains two input fields, "Enter key..." and "Enter Value...", followed by a button labeled "Insert Data into Local Storage".
- Delete Data from Local Storage**: Contains an input field "Enter Key...", a button "Delete Item", and a button "Clear Web Storage".
- Web Storage Current Contents**: Displays the current data in the local storage:  
Key: Banana - Value: 1 dozen  
Key: eggs - Value: 2 dozens  
Key: tomatoes - Value: 20 units

Figure 5

## Deleting an entry from the local storage

In the JavaScript file, track down which function is called by the event listener associated with the “Delete Item” button. Add code to delete an item based on its key, that is entered in the text input field, as shown in Figure 6. Check the local storage in your browser and see if the item has been deleted, as shown in Figure 7.



**Web Storage - JavaScript**

**View Contents of the Local Storage**

View Contents of Local Storage

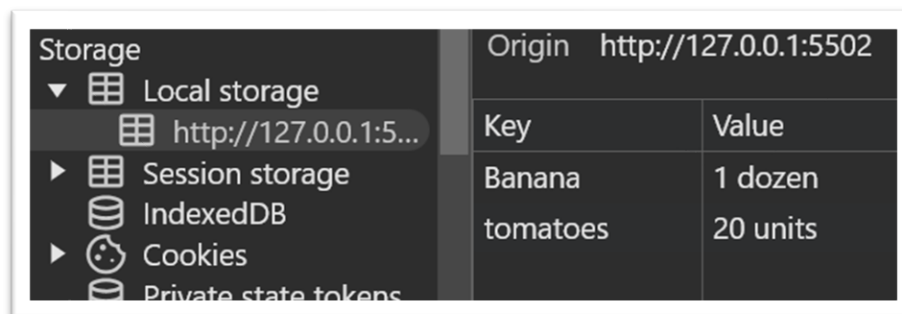
**Insert Data into Local Storage**

Enter key... Enter Value... Insert Data into Local Storage

**Delete Data from Local Storage**

eggs Delete Item Clear Web Storage

Figure 6



Storage		Origin http://127.0.0.1:5502	
▼	Local storage		
	http://127.0.0.1:5...	Key	Value
▶	Session storage	Banana	1 dozen
	IndexedDB	tomatoes	20 units
▶	Cookies		
	Private state tokens		

Figure 7

## Clearing the Web Storage

In the JavaScript file, track down which function is called by the event listener associated with the “Clear Web Storage” button. Add code to clear all items found in the local storage. Check if the local storage in your browser is cleared as shown in Figure 8.

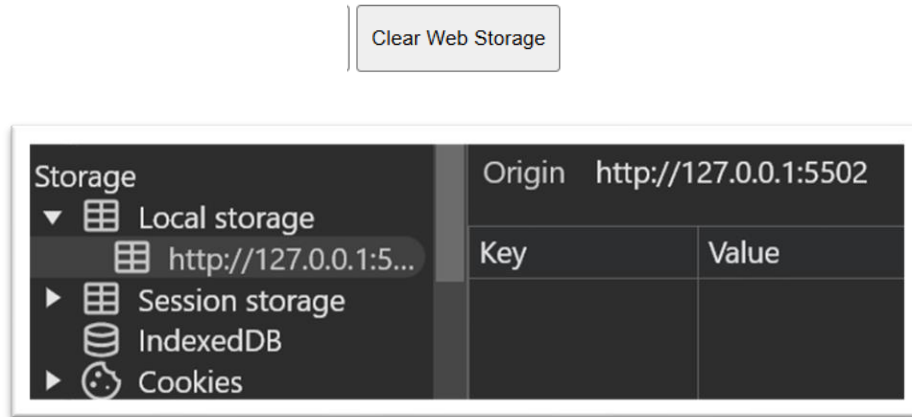


Figure 8