

**Original prompt: This code doesn't work. How do I fix it?**  
**Also pasted the contents of the JavaScript file into the chat prompt.**

The issue lies in how you're storing and retrieving data from localStorage. localStorage can only store strings, but you're attempting to store an object directly. When you retrieve it, it's not being parsed back into an object, causing errors when you try to access its properties.

Here's the breakdown of the problem and the corrected code:

**Problem:**

1. **Storage:**

- localStorage.setItem(STORAGE\_KEY, toStore); stores the toStore object as "[object Object]" because localStorage implicitly converts objects to strings using toString(), which defaults to "[object Object]".

2. **Retrieval:**

- const savedMessage = localStorage.getItem(STORAGE\_KEY); retrieves the stored string, which is "[object Object]".
- savedMessage.name, savedMessage.email, and savedMessage.message are then undefined because "[object Object]" does not have those properties.

**Solution:**

1. **Stringify for Storage:**

- Use JSON.stringify() to convert the object into a JSON string before storing it.

2. **Parse for Retrieval:**

- Use JSON.parse() to convert the JSON string back into an object when retrieving it.

3. **Check for valid JSON:**

- Add a try catch block to the parse to ensure the string is valid json.

**Corrected Code:**

JavaScript

```
const name = document.getElementById("name");
const email = document.getElementById("email");
const message = document.getElementById("message");
const submitBtn = document.getElementById("submit");

const STORAGE_KEY = "lastMessageSent";

/**
 * Create a random 9 digit number
 * @returns {number}
 */
function createRandomRefNumber() {
    return Math.ceil(Math.random() * 1000000000);
}

/**
 * Create and show a confirmation message
 */
function getConfirmation() {
```

```

const savedMessageString = localStorage.getItem(STORAGE_KEY);
if (savedMessageString) {
    try{
        const savedMessage = JSON.parse(savedMessageString);
        const confirmation =
document.getElementById("confirmation");
        confirmation.innerHTML = `
            <h2>Thank you for your message!</h2>
            <p>Your reference number is:
${createRandomRefNumber()}</p>
            <p>You sent us the following:</p>
            <p>Name: ${savedMessage.name}</p>
            <p>Email: ${savedMessage.email}</p>
            <p>Message: ${savedMessage.message}</p>`;
        } catch (e){
            console.error("Error parsing stored JSON", e);
        }
    }
}

submitBtn.addEventListener("click", function (event) {
    event.preventDefault();
    // Get the user's data
    const userName = name.value;
    const userEmail = email.value;
    const userMessage = message.value;

    // Put the data in an object for storage
    const toStore = {
        name: userName,
        email: userEmail,
        message: userMessage,
    };
    // Store the data
    localStorage.setItem(STORAGE_KEY, JSON.stringify(toStore));

    // Clear the form fields
    name.value = "";
    email.value = "";
    message.value = "";

    // Show a confirmation message
    getConfirmation();
});

getConfirmation();

```

### Key Changes:

- **localStorage.setItem(STORAGE\_KEY, JSON.stringify(toStore));**: The object is now converted to a JSON string before being stored.
- **const savedMessage = JSON.parse(savedMessageString);**: The retrieved string is parsed back into an object.
- **Try catch block added:** this ensures that if the stored data is invalid json, that the page will not crash.

With these changes, your code should correctly store and retrieve the user's data, and display the confirmation message.