

CMPS 3680 Guided Lab 10

Spring 2026

Part 1 - Setup

1. For this assignment you will have multiple files, so I would highly recommend creating a lab10 folder.
2. **Inside** of the lab10 folder run the following commands from the terminal:

```
wget https://cs.csubak.edu/~paul/cs3680/labs/lab10.zip;
unzip lab10.zip;
rm lab10.zip
```

This will download and extract the required files you will use for this lab.

3. Review these files carefully. Notice I have already given all of the necessary elements IDs so you can access them in your JS code.
4. You will be using JSON RPC 2.0 to make API calls to the following URL:

```
https://paul.cs3680.com/labs/api
```

5. The documentation for the API can be found here:

```
https://paul.cs3680.com/labs/docs/labs.html
```

Notice there are three remote methods available (**hello**, **add**, and **giphy**) and each one has different parameters that must be passed.

6. Review the specifications for JSON RPC 2.0 - pay specific attention to the provided examples:

```
https://www.jsonrpc.org/specification#examples
```

All of the methods I have provided in the API are using **NAMED PARAMETERS** (key/value pairs)

Part 2 - script.js

1. For this lab you will be making remote procedure calls to the API I have provided. The parameters will be acquired from the input fields in lab10.html when the user clicks the corresponding button.
2. You can use the fetch function to complete the api calls.
3. Remember that with JSON RPC all requests must be post requests, and the request body (aka payload) will always follow the same JSON format, for example:

```
{
  "method": "hello",
  "params": {
    "name": "BOB"
  },
  "id": "1",
  "jsonrpc": "2.0"
}
```

HINT: You can convert a javascript object to a JSON string with the `JSON.stringify()` function.

4. If you receive a valid response from the server, you will update the corresponding response element for each call. For the **hello** and **add** calls you will modify the text inside the `<p>` elements. For the **giphy** call you will update the `src` attribute for the `` element so the gif shows up on the page.
5. If you receive an error, update the provided error div with the error message received and remove the `hidden` class.

Example Image of Completed Lab:


Your Name:

Hello Paul Royer

Value 1: Value 2:

1380

Giphy Keyword:



The image shows a web application interface with a light green border. It consists of four main sections. The top section is a white input area with the text 'Your Name:' followed by a text box containing 'Paul Royer' and a 'hello' button. Below this is a large grey rectangular area containing the text 'Hello Paul Royer' in a large, black, sans-serif font. The third section is another white input area with the text 'Value 1:' followed by a text box containing '43', 'Value 2:' followed by a text box containing '1337', and an 'add' button. Below this is a large grey rectangular area containing the number '1380' in a large, white, sans-serif font with a blue and yellow drop shadow. The bottom section is a white input area with the text 'Giphy Keyword:' followed by a text box containing 'cat' and a 'giphy' button. Below this is a large grey rectangular area containing a small image of a grey cat with yellow eyes, looking slightly to the right. The image has a small 'giphy.com' watermark in the top left corner.