Applied Computer Science

ACS-2909 Internet Programming

Due Date: TUESDAY March 31st, 2020 11:59 pm Total Marks: 24

Remote Calls and XHR (24 Marks)

The goal of this assignment increases your understanding of asynchronous communication and the JSON format.

Interaction Explanation

Create a page that uses XHR to communicate with an external URL and retrieve values in JSON and generate colour swatches based on the returned values.

- Include a button on the page that says "Request Swatch".
- Clicking the button will trigger an XHR request to the colors.php file located in the Assignment folder on the website.
 - You must include a *passcode* with a value of <code>secret!</code> using the *GET* method
 - You must take the response (JSON) and create a new *color swatch box*

Color Swatch Box Specifications

- The background color should match what is returned from the server.
- The text inside the box should be the name of the swatch.
- Each box must be 200x200 pixels, which means the background colour as seen by the user is 200x200.
- We don't want the text touching the edge, so make sure there's 10px of padding on it.
- Boxes should have 20px margin between them, so they don't touch.
- The titles of the colors must be in white.
- The boxes should sit next to each other and continue to spill over, left to right as more are added. They should spill to new lines if needed.

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Failed Request Testing

We should also test what a failed request looks like.

- Create a second button on your page that says "Request Failure"
- Clicking on the second button will trigger a different XHR request to the colors.php file but *without* the passcode.
- Your code must detect the error and present the error message in a <h2>
- Your code should clear the message whenever a successful call is made.

Hand In Instructions:

Zip all files into a single archive named *StudentNumber_*Assignment4.zip. Submit the zip file to the marker at <u>2909-051@acs.uwinnipeg.ca</u>.

You must use your uwinnipeg email address!

Please allow yourself time to package the file and send it. Anything *received* after the deadline is considered late.