**Activity 1:**

Fetch API is an interface for fetching objects. It is an alternate to XMLHttpRequest.

The Fetch is used as below,

Fetch (URL).then

(function(response){

If response is received, then do something

console.log(“fetched ”+response);

})

.catch(function(error){

If error is returned, Display appropriate message

console.log(“Error: ”+error);

});

By default, the HTTP request is a GET. We can use other types of request’s perusal. The method name should be passed in a JSON with method as key and its value as the method name.

References: “[Working with the Fetch API  |  Web  |  Google Developers](https://developers.google.com/web/ilt/pwa/working-with-the-fetch-api#:~:text=The%20Fetch%20API%20is%20a,Origin%20Resource%20Sharing%20(CORS).)”

Activity 2

In this activity, I learnt what asynchronous programming means.

I understood that this is a concept where the execution of one statement is not dependent on successful execution of a previous statement.

This paradigm was demonstrated using an example which helped me understand the concept clearly. Below I have explained my takeaways from the example.

I have divided the program into segments.

Text

Description automatically generated

Once the XMLHttpRequest object is created at line 6, the readystate attribute value is initialized to 0.

Next, the control goes to line 11 because Line 7 does not execute the inline function as the onreadystatechange event has not been triggered.

At line 11, when the open function is called, the readystate value changes to 1 and the event onreadystatechange is triggered so control goes to line 7. The if condition is not satisfied so control returns to line 12 now.

Once send function is executed, the readystate value changes to 2 and the event onreadystatechange is triggered so control goes to line 7. The if condition is not satisfied so control returns to line 13 now.

Once the response body is being received, the readystate value changes to 3 and the event onreadystatechange is triggered so control goes to line 7. The if condition is not satisfied so control returns back to line 13 now.

Now once the entire response body is received, readystate value changes to 4 and the event onreadystatechange is triggered so control goes to line 7. The if condition is satisfied now so line 9 is executed. The xhr object is passed to myFunction and the function is executed.

Activity 3:

Graphical user interface, text, email

Description automatically generated

I created an account with openweather. And I received my API key.

I used the API to get the weather of Toronto in XML format.

The endpoint I used is:

<http://api.openweathermap.org/data/2.5/weather?q=Toronto&APPID=2e59fd0b2130921b24b3cee7923ba4d5&mode=xml&units=metric>

Graphical user interface

Description automatically generated with medium confidence