**CSE 4500 – Platform Computing**

**Professor Lawrence Orijuela**

**Project 1: Pokedex Application (Due Mar 15th)**

**(Accompanying Lecture Vids:** [**https://www.youtube.com/watch?v=vYEpDy4hsI8**](https://www.youtube.com/watch?v=vYEpDy4hsI8)**)**

**Instructions:**

1. **Download this assignment as an editable word doc from Canvas.**
2. **Write your name and student ID.**
3. **Write your answers in the spaces provided. Give yourself more space as needed.**
4. **Export this doc with your name and answers as a PDF and resubmit it to canvas.**
   1. **Use this as your title: CSE4500\_YourName\_Project#**
   2. **Example: CSE4500\_BobSmith\_ Project #1**

Name: Student ID #: Points:\_\_\_\_\_/100

In this assignment, you will use HTML, CSS, and JavaScript to make a simple pokedex application that makes requests to the Restful Pokémon API (<https://pokeapi.co/>).

You will learn about how webpages make service requests over the internet, including information about parameters, headers, and responses in JSON (JavaScript Object Notation).

Please watch the accompanying lecture video as you proceed.

Implement HTML (30 points)

1. In your *JavaScript\_Projects* folder, create a new folder called *Project1\_Pokedex.*
2. Create an index.html page and add the following code:

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Lawrence Orijuela's Pokedex Application</title>

    <link rel="stylesheet" href="css/style.css">

</head>

<body>

    <h1>Your Name's Pokedex</h1>

    <div class="poke-container" id="poke-container">

        <div class="pokemon" style="background-color: rgb(222,253,224)">

            <div class="img-container">

                <img src="https://raw.githubusercontent.com/PokeAPI/sprites/master/sprites/pokemon/1.png" alt="">

            </div>

            <div class="info">

                <span class="number">#001</span>

                <h3 class="name">Bulbasaur</h3>

                <small class="type">Type: <span>grass</span></small>

            </div>

        </div>

    </div>

    <!-- <script src = "scripts/script.js"></script> -->

</body>

</html>

Implement CSS (20 points)

1. Create a *CSS* folder if you have not created one already.
2. Add a file called style.css.
3. Add a link tag to your index.html that references style.css.
4. I will provide you the CSS code. Please refer to the Accompanying Video for an explanation of the CSS rules.

\* {

    box-sizing: border-box;

}

body {

    background: #efefbb;

    background: linear-gradient(to right, #d4d3dd, #efefbb);

    font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif;

    display: flex;

    flex-direction: column;

    align-items: center;

    justify-content: center;

    margin: 0;

}

h1 {

    letter-spacing: 3px;

}

.poke-container {

    display: flex;

    flex-wrap: wrap;

    align-items: space-between;

    justify-content: center;

    margin: 0 auto;

    max-width: 1200px;

}

.pokemon {

    background-color: #eeeeee;

    border-radius: 10px;

    box-shadow: 0 3px 15px rgba(100, 100, 100, 0.5);

    margin: 10px;

    padding: 20px;

    text-align: center;

}

.pokemon .img-container {

    background-color: rgba(255, 255, 255, 0.6);

    border-radius: 50%;

    width: 120px;

    height: 120px;

    text-align: center;

}

.pokemon .img-container img {

    max-width: 90%;

    margin-top: 20px;

}

.pokemon .info {

    margin-top: 20px;

}

.pokemon .info .number {

    background-color: rgba(0, 0, 0, 0.1);

    padding: 5px 10px;

    border-radius: 10px;

    font-size: 0.8em;

}

.pokemon .info .name {

    margin: 15px 0 7px;

    letter-spacing:  1px;

}

Implement JavaScript (30 points)

1. Create a *Scripts* folder in your application if you have not already.
2. Create a file called script.js.
3. Add the following code:

const poke\_container = document.getElementById('poke-container');

const pokemon\_count = 152;

const colors = {

    fire: '#FDDFDF',

    grass: '#DEFDEO',

    electric: '#FCF7DE',

    water: '#DEF3FD',

    ground: '#f4e7da',

    rock: '#d5d5d4',

    fairy: '#fceaff',

    poison: '#98d7a5',

    bug: '#f8d5a3',

    dragon: '#97b3e6',

    psychic: '#eaeda1',

    flying: '#F5F5F5',

    fighting: '#E6E0D4',

    normal: '#F5F5F5',

};

const main\_types = Object.keys(colors);

1. Refer to the accompanying lecture video to add the following:
   1. An async function called fetchPokemons() that uses a for loop to iterate between 1 and 152:
      1. For each iteration, it calls a function called getPokemon(id) that accepts an integer id.
   2. An async function called getPokemon(id) that:
      1. References and makes a call to the pokedex API:
         1. URL = “'https://pokeapi.co/api/v2/pokemon/' + id;”
      2. Retrieves the response data in JSON format.
      3. Calls another function called createPokemonCard(data) that accepts the response as an argument.
   3. A function createPokemonCard(data) that uses the .appendChild function to update the HTML.
2. Go back to your index.html and remove all the content inside the div container with the class ‘poke-container’.
3. Call the fetchPokemons() function.

Add YOUR Pokedex Icon (10 points)

You will add the Pokeball Icon that you created in your Homework0 to this application. To do this, do the following:

1. Create an *Assets* folder in your application if you have not already.
2. Click-drag your pokeball icon into this folder.
3. Inside the *head* tag of your application, create a link tag that reads the following:

<link rel="icon" href="assets/Pokeball.png" type="image/png">

1. Change the href (hypertext reference) attribute to point to your image.
2. Add a screenshot of your finished Pokedex Application to this section:

Add this project to YOUR About Me Page (10 points)

Now you will add this project to your About Me page that you created in Homework #1.

1. Take the screenshot that you made in the previous section and use an image editor to format the image so that it is square (maybe 1024 x 1024 pixels).
2. Create a new div section in your applications page and your pokedex app.
3. Take a screenshot of the newly updated Projects page and insert it in this section:

Deliverables

On the canvas submission page, please submit:

* This completed document with the two screenshots.
* A ZIP file containing your pokedex application.