

# JavaScript App (Pokedex)

# Project Overview

- ▶ The Pokedex a small web app built with Javascript, HTML, CSS, jQuery, and Bootstrap framework. Users can search through a pokemon collection that is loading from an external API. Details can be displayed in a modal by clicking on a pokemon's name.
- ▶ Objective: To build a small web application with HTML, CSS, and JavaScript that loads data from an external API and enables the viewing of data points in detail
- ▶ Key features:
  - ▶ ● Load data from an external source (API)
  - ▶ ● View a list of items
  - ▶ ● On user action (e.g., by clicking on a list item), view details for that item

## User Goal:

Users should be able to view a list of data and see more details for a given data item on demand.

# Technical requirements

- The app must load data from an external API; for instance, the Pokémon API.
- The app must display a list of items loaded from that API after the page is loaded.
- The app must enable the viewing of more details for a given list item (like a Pokémon) on demand, such as when clicking on a list item.
- The app must have CSS styling.
- The JavaScript code must be formatted according to ESLint rules.
- The app must use at least one additional complex UI pattern, such as a modal, for details or touch interactions.
- The app must not throw any errors when being used.
- The app should be deployed to a publicly accessible platform like GitHub Pages
- The app must work in Chrome, Firefox, Safari, Edge, and Internet Explorer 11.

# Purpose and Context/Objective

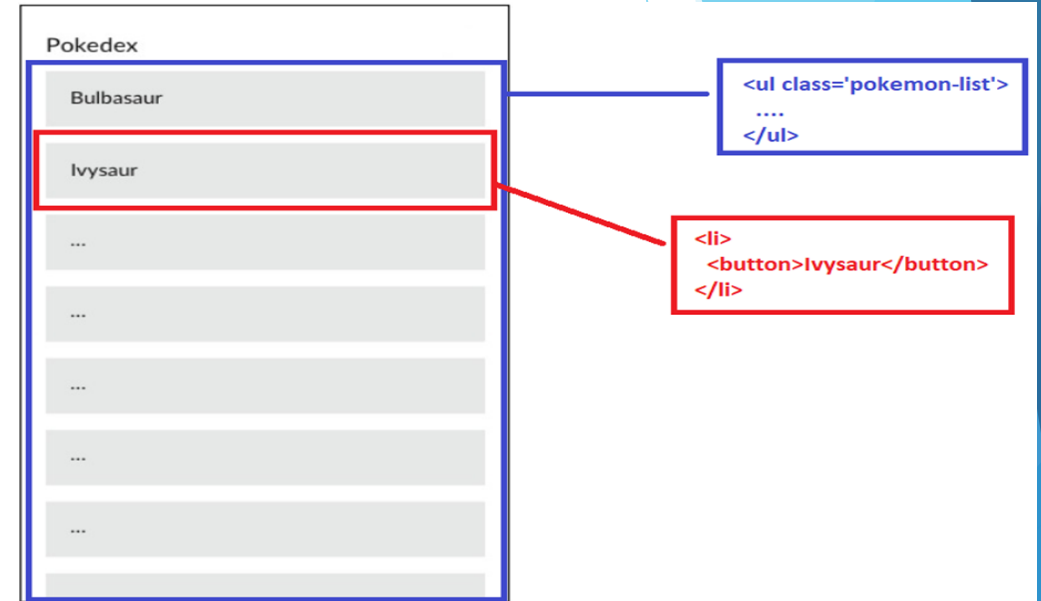
- ▶ Purpose and Context:
- ▶ The Pokedex was a personal project I built as part of my web development course at CareerFoundry to demonstrate my mastery of full-stack JavaScript development.
- ▶ Objective:
- ▶ The aim of the project was to have an ambitious full-stack project I can add to my professional portfolio. The problem I wanted to solve is to build an app that showcases pokemon and the ability to search one up and look at their stats.

# DOM Interaction

- ▶ Document Object Model (DOM) is a programming interface for HTML. It represents an HTML web page as JavaScript “objects,” allowing JavaScript to interact with, and even make changes to, the HTML page.

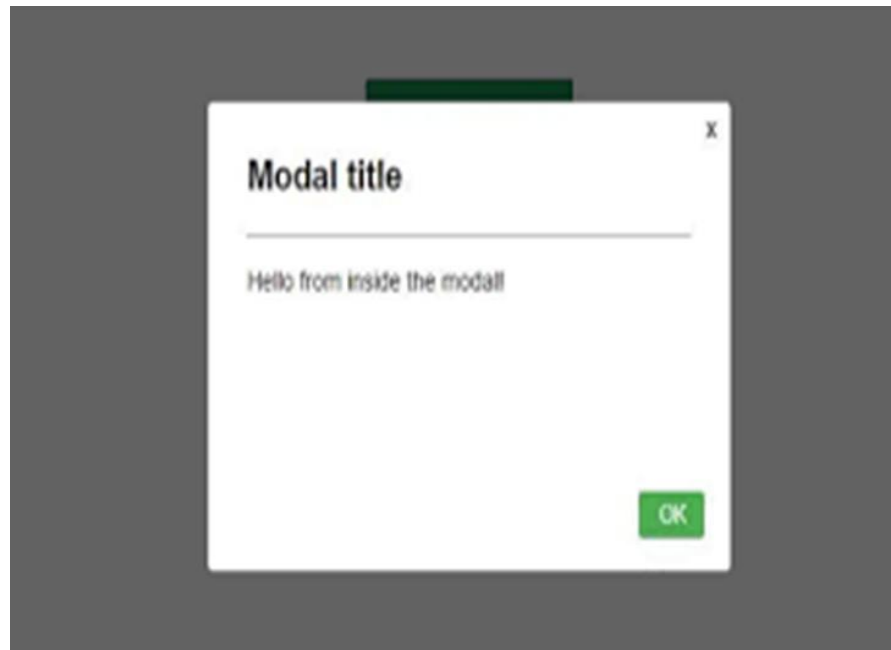
Example:

- ▶ `<!DOCTYPE html>`
- ▶ `<html>`
- ▶ `<head>`
- ▶ `<meta charset="utf-8">`
- ▶ `<meta name="viewport" content="width=device-width, initial-scale=1.0">`
- ▶ `<title>Simple DOM example</title>`
- ▶ `</head>`
- ▶ `<body>`
- ▶ `<section>`
- ▶ ``
- ▶ `<p>Here we will add a link to the <a href="https://www.mozilla.org/">Mozilla homepage</a></p>`
- ▶ `</section>`
- ▶ `</body>`
- ▶ `</html>`



# Modals

- ▶ The Pokedex app utilizes modals when you select a pokemon in the app. A modal or dialog box is a message box that allows further interactivity of the page without navigating away from the current content in the browser. When you select a pokemon in the app, a modal pops up displaying information about said pokemon.



# jQuery

- ▶ Query is a JavaScript library designed to simplify HTML DOM tree traversal and manipulation, as well as event handling, CSS animation, and Ajax. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

- ▶ Example:

- ▶ `function showModal(pokemon) {`
- ▶ `let modalTitle = $(".modal-title");`
- ▶ `let modalBody = $(".modal-body");`
- ▶ `modalTitle.empty();`
- ▶ `modalBody.empty();`

```
console.log($) // function()
console.log(typeof $) // "function"

console.log($()) // null
console.log(typeof $()) // "object"

try {
  console.log($.jquery)
  console.log(typeof $.jquery)
} catch (e) {
  console.log(e)
} // TypeError: "$() is null"

// In jQuery, $() is an alias of jQuery():
try {
  console.log(jQuery)
  console.log(typeof jQuery)

  console.log(jQuery())
  console.log(typeof jQuery())

  console.log(jQuery().jquery)
  console.log(typeof jQuery().jquery)
} catch (e) {
  console.log(e)
} // ReferenceError: "jQuery is not defined"
```

# Technologies used

- ▶ HTML
- ▶ CSS
- ▶ JavaScript
- ▶ External API

```
{layout:set name="scripts"}
<script>
  var inputs = document.querySelectorAll( '.inputfile' );
  Array.prototype.forEach.call( inputs, function(input)
  {
    var label = input.nextElementSibling, labelVal = label.innerHTML;

    input.addEventListener('change', function(e)
    {
      var fileName = '';
      if(this.files && this.files.length > 1)
        fileName = (this.getAttribute('data-multiple-caption') || '').
          replace
      else
        fileName = e.target.value.split('\\').pop();

      if(fileName)
        label.querySelector('span').innerHTML = fileName;
      else
        label.innerHTML = labelVal;
    });
  });
</script>
{/layout:set}
```



- ▶ JavaScript:
- ▶ JavaScript is a text-based programming language used both on the client-side and server-side that allows you to make web pages interactive. JavaScript gives web pages interactive elements that engage a user. Common examples of JavaScript that you might use every day include the search box on Amazon, a news recap video embedded on The New York Times, or refreshing your Twitter feed.
- ▶ Example:
- ▶ `function showDetails(pokemon) {`
- ▶     `loadDetails(pokemon).then(function () {`
- ▶         `console.log(pokemon);`
- ▶         `showModal(pokemon);`
- ▶     `});`
- ▶ `}`

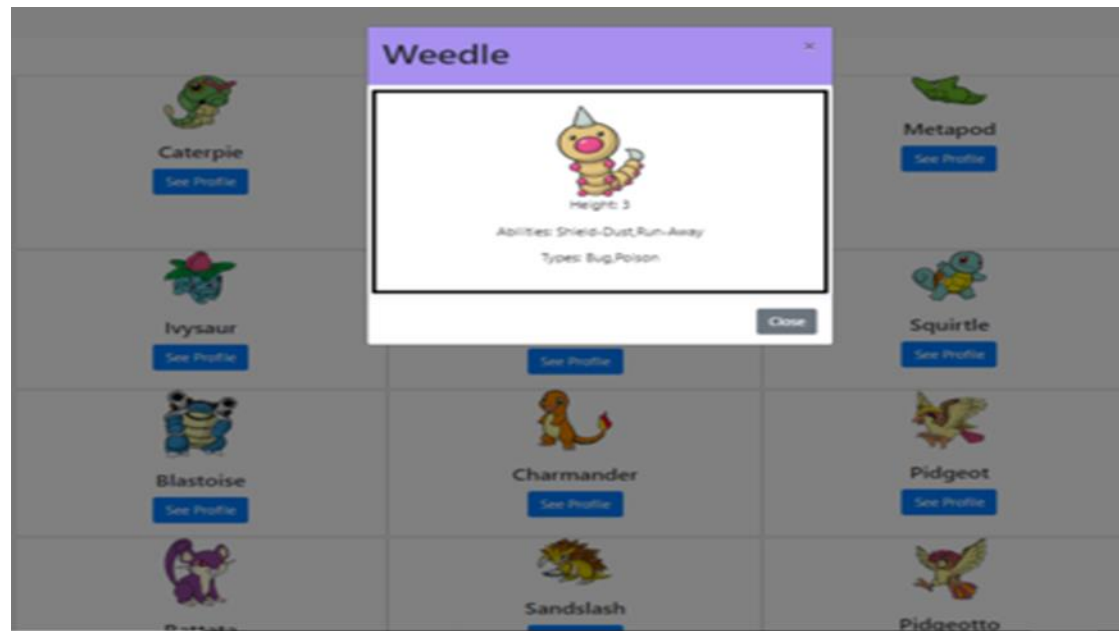
- ▶ External API:
- ▶ An external or open API is an API designed for access by a larger population as well as web developers. An application programming interface is a connection between computers or between computer programs. It is a type of software interface, offering a service to other pieces of software.

- ▶ Example:

- ▶ {
- ▶     "name": "bulbasaur",
- ▶     "url": "https://pokeapi.co/api/v2/pokemon/1/"
- ▶ },
- ▶ {
- ▶     "name": "ivysaur",
- ▶     "url": "https://pokeapi.co/api/v2/pokemon/2/"
- ▶ },

# My Application

- ▶ Here is my link to my GitHub repository:
- ▶ <https://github.com/1998-creator/simple-js-app>



# Challenges

- ▶ Besides my portfolio, this was my first project that I built so a lot of the material involved was new to me and took time to learn.
- ▶ Understanding how to implement the API into the project
- ▶ Taking my Javascript I wrote previously and translating it into jQuery
- ▶ Updating the forEach loops to work within the IIFE
- ▶ Making sure I was learning the material in the project while also keeping a good schedule

# Retrospective

- ▶ What went well:
  - ▶ After the completion of the project, no errors were found. The app displays a list of items loaded from the API after the page is loaded. The app properly loads the specific colors for each pokemon type that is selected by the user.
- ▶ What didn't go well:
  - ▶ It took some getting use to when it came to understanding some of the functions and loops for the app.
- ▶ What can be improved:
  - ▶ Some more CSS stylings could be added to make it look more like a legit app. Some more in-depth information of each pokemon could be added for the user to see more details about each pokemon.