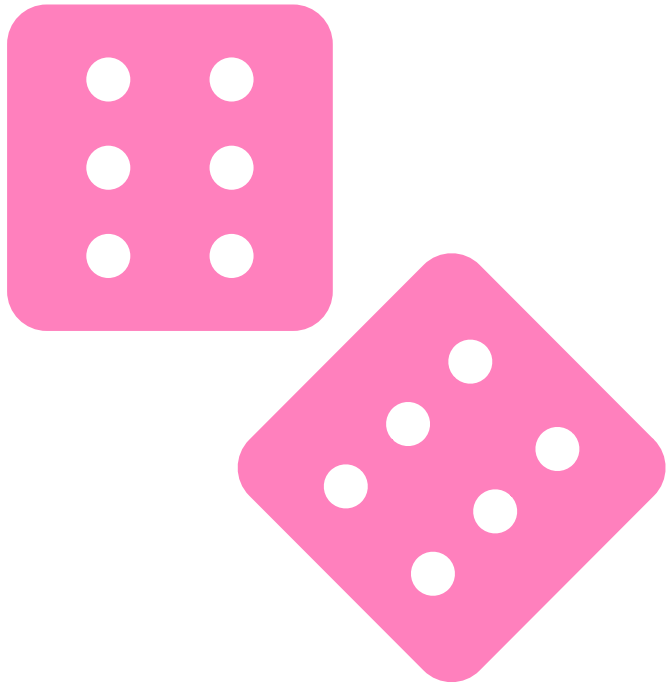
CASE STUDY: POKÉDEX

Overview

- An application that retrieves information about Pokémon from an external API. When a Pokémon's name is clicked, detailed information about that specific Pokémon is displayed. This project contains JS, HTML, CSS, Bootstrap, jQuery, and ESLint.

Purpose

- The Pokédex project aims to provide users with an interactive and visually appealing way to explore Pokémon data. By leveraging an external API, the application allows users to browse a wide range of Pokémon, view detailed information, and enhance their experience through a responsive and user-friendly interface. Built with JavaScript, HTML, CSS, Bootstrap, and jQuery, the project focuses on accessibility, efficiency, and seamless data retrieval.

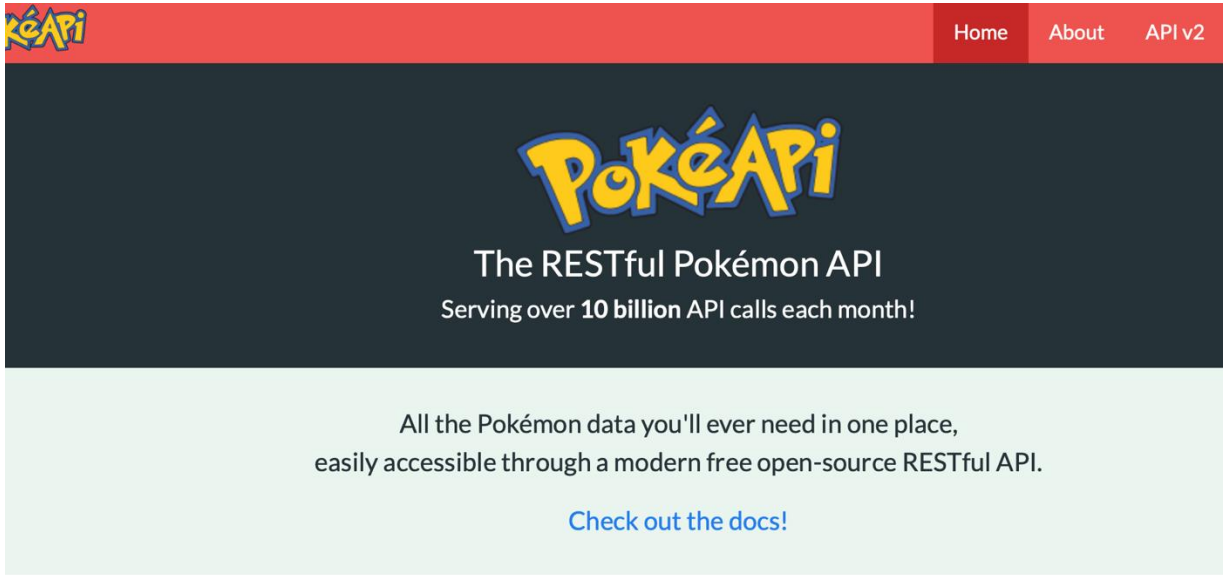


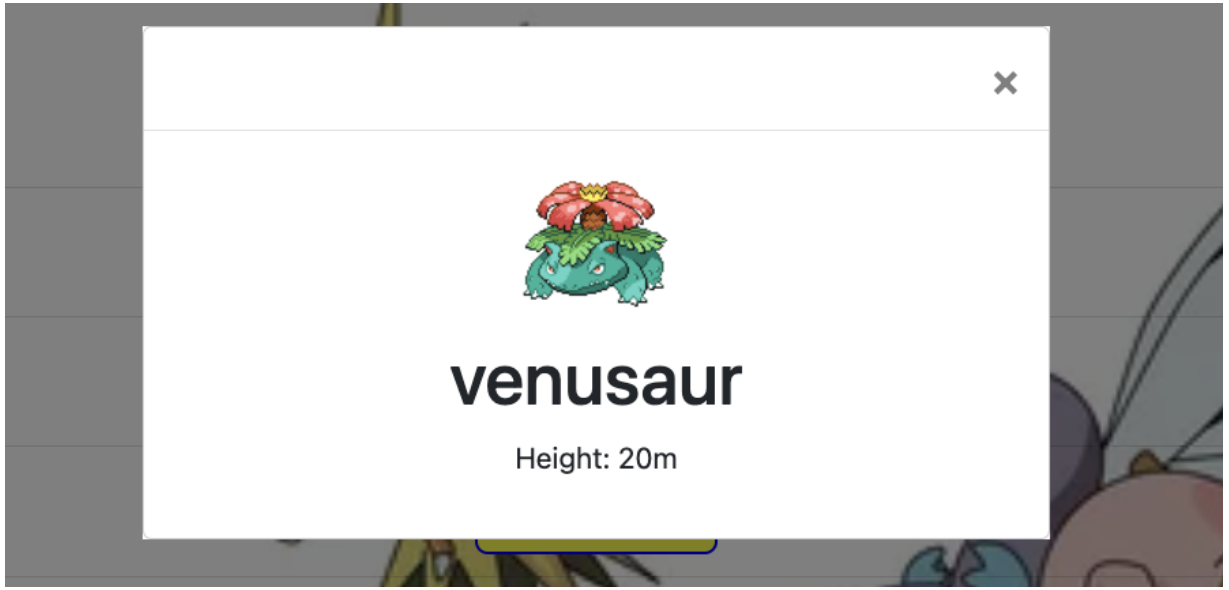
Objective

- The objective of the Pokédex project is to create a dynamic and engaging Pokémon database that enables users to easily search for and access detailed information on various Pokémon. Utilizing modern web technologies such as JavaScript, jQuery, and Bootstrap, the project aims to ensure smooth interactivity, responsive design, and an intuitive user experience.

Approach

- **Planning & Setup** – Defined the project scope, selected technologies (JavaScript, jQuery, Bootstrap), and set up the project structure.
- **Fetching & Displaying Data** – Integrated an external Pokémon API, enabling real-time data retrieval and rendering Pokémon lists dynamically.
- **Interactive Features** – Implemented event listeners to display detailed Pokémon information upon selection, ensuring a seamless user experience.
- **Styling & Responsiveness** – Used Bootstrap for a clean and mobile-friendly design, ensuring accessibility across different devices.
- **Code Optimization & Linting** – Applied ESLint for code consistency and best practices, improving maintainability.


Home
About
API v2
PokéAPI
The RESTful Pokémon API
Serving over 10 billion API calls each month!
All the Pokémon data you'll ever need in one place,
easily accessible through a modern free open-source RESTful API.
Check out the docs!


venusaur
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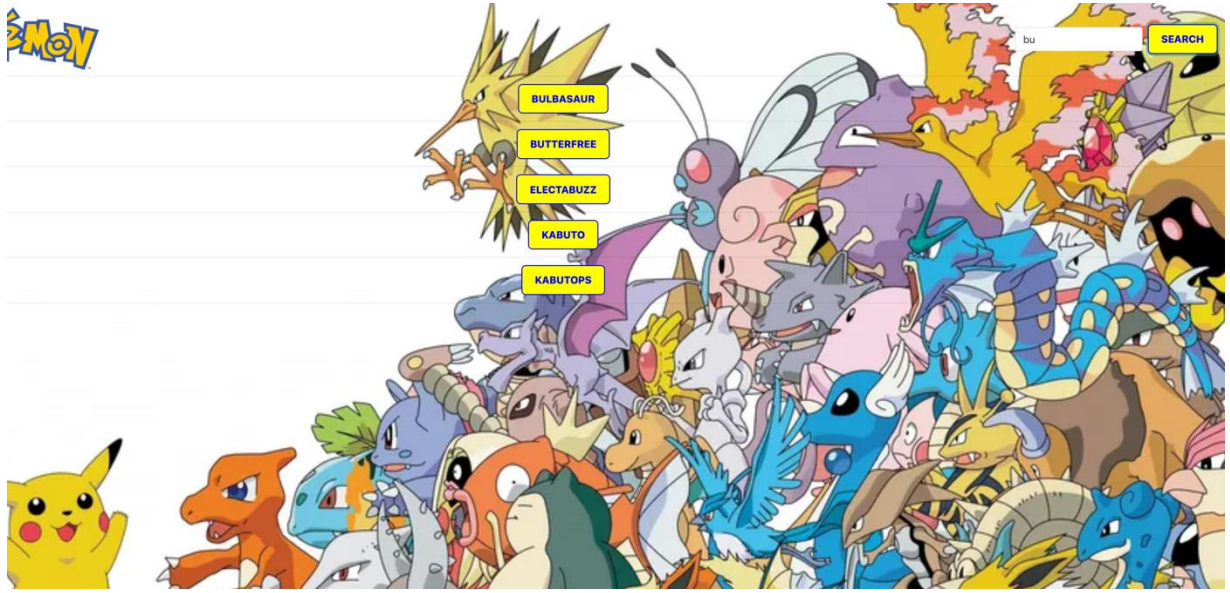
SEARCH
BULBASAUR
BUTTERFREE
ELECTABUZZ
KABUTO
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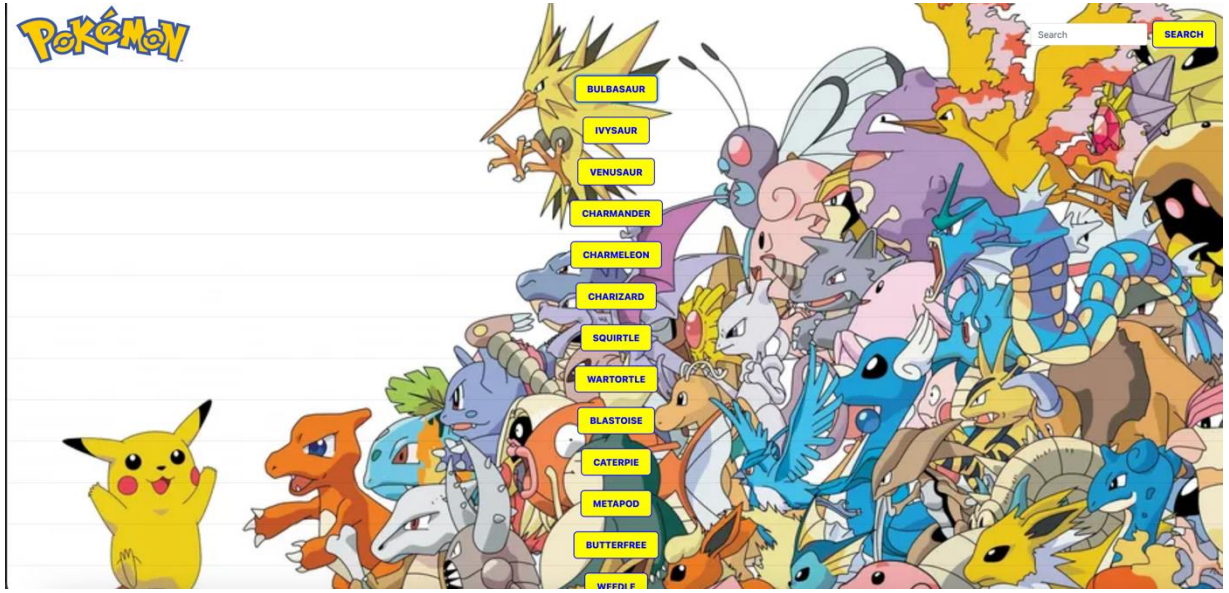
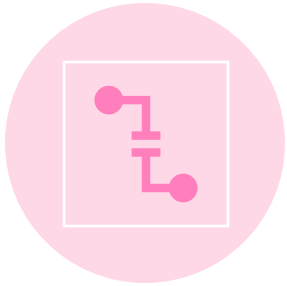

Search
SEARCH
BULBASAUR
IVYSAUR
VENUSAUR
CHARMANDER
CHARMELEON
CHARIZARD
SQUIRTLE
WARTORTLE
BLASTOISE
CATERPIE
METAPOD
BUTTERFREE

Challenges

API Data Handling – Managing asynchronous data fetching efficiently while ensuring smooth UI updates.



Performance Optimization – Ensuring fast loading times when rendering multiple Pokémon entries dynamically.

Styling Consistency – Balancing Bootstrap's predefined styles with custom CSS for a unique yet cohesive design.

Debugging & Code Quality – Resolving jQuery event handling issues and maintaining clean, error-free code with ESLint.

Duration

WEEK 1: INITIAL PLANNING, PROJECT SETUP, AND API INTEGRATION FOR RETRIEVING POKÉMON DATA.

WEEK 2: IMPLEMENTING DYNAMIC UI COMPONENTS, EVENT HANDLING, AND DETAILED POKÉMON INFO MODALS.

WEEK 3: STYLING WITH BOOTSTRAP AND CUSTOM CSS, REFINING LAYOUT FOR RESPONSIVENESS.

WEEK 4: CODE OPTIMIZATION, DEBUGGING, ESLINT CONFIGURATION, AND FINAL TESTING FOR SMOOTH PERFORMANCE.

Retrospective

- Building the Pokédex project was an exciting challenge that strengthened my understanding of JavaScript, jQuery, and API integration. Handling asynchronous data and ensuring a responsive UI improved my problem-solving skills. Utilizing Bootstrap helped me refine my approach to styling while maintaining flexibility in design. The experience reinforced the importance of clean, maintainable code through ESLint and debugging practices. This project was a valuable learning experience, enhancing my confidence in developing interactive web applications.

Credits

Developer: Haley Tolar

Tutor: Adam Pagels

Mentor: Shawn Rice