



Case Study of Pokémon App

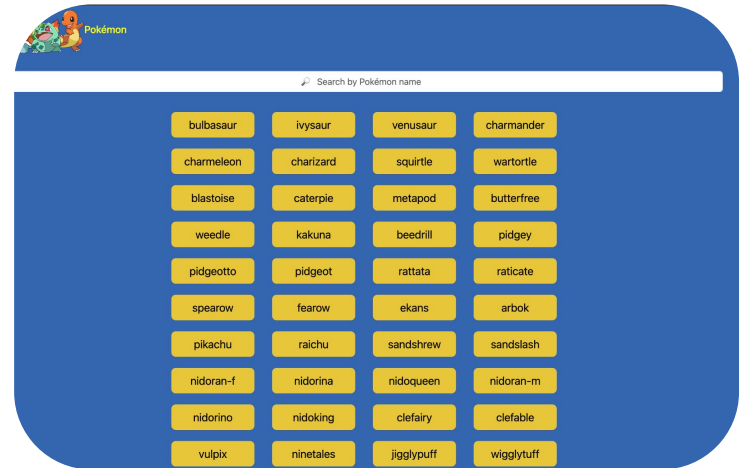
Sanju Shah - Full Stack Developer



Overview

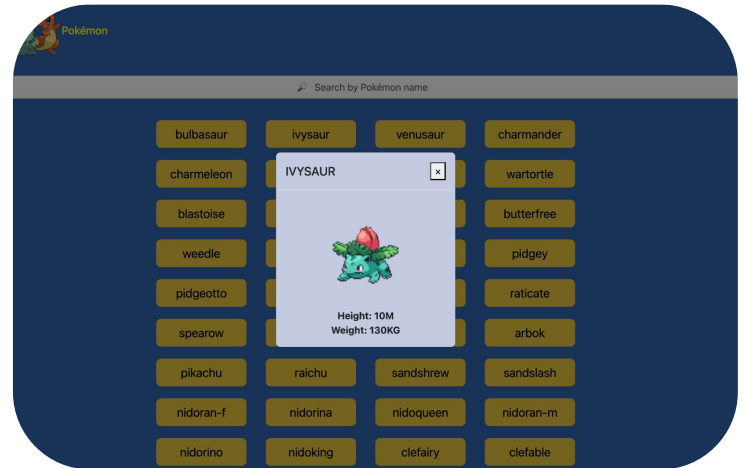
This case study explores design and development of a Pokémon information web application.

Live Site



Objective

- Develop an interactive web application to fetch and display about Pokémon.
- Allow users to filter and search for Pokémon by name.



Features

- Display a list of Pokémon.
- Show detailed information for each Pokémon including height and weight.
- Allow users to get specific Pokémon by name.



Technologies

- JavaScript is core programming language to implement functionality.
- With the help of Bootstrap, application is responsive and user-friendly.
- Fetch API is used to make HTTP requests to the Pokémon API and retrieving data.
- Pokémon API is the data source for Pokémon information.

```
JS Scripts.js > @ pokemonRepository > <function> > loadList
1  var pokemonRepository = (function () {
37  async function loadList() {
38    try {
39      const response = await fetch(pokeApiUrl);
40      const json = await response.json();
41      hideLoadingMessage();
42      json.results.forEach((item) => {
43        let pokemon = {
44          name: item.name,
45          detailsUrl: item.url,
46          height: item.height,
47          weight: item.weight,
48        };
49        addPokemon(pokemon);
50      });
51    } catch (e) {
52      hideLoadingMessage();
53      console.error(e);
54    }
55  }
56 }
```

Development Process

- Created initial wireframes to visualize the layout and flow of the Pokémon application.
- The application was implemented with a structured HTML layout, styled using Bootstrap, and JavaScript to implement core functionality and utilized the Fetch API for data fetching.
- Search functionality was added for real-time filtering.
- For version control and collaboration, gitHub is used.

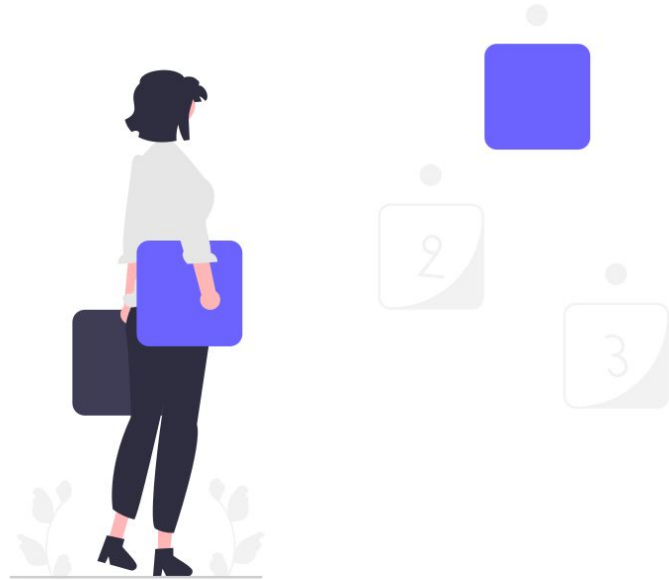
Challenges and Solutions

- Challenge: Handling API rate limits.
- Solution: Implemented caching to reduce repeated API calls.

- Challenge: Maintaining a responsive design.
- Solution: Utilized Bootstrap and responsive CSS utilities.

Future Enhancement

- **Add Sorting Options** so that user can search Pokémon by various attributes like height, weight.
- **Creating user profile** to save favorite Pokémon and access personalized data.



Conclusion

The Pokémon web application successfully achieved its goal of providing a user-friendly platform to explore and learn about Pokémon. Demonstrated effective use of modern web technologies, by using JavaScript, Bootstrap, and the Fetch API and building responsive and engaging application.



Thanks!

From Unsplash