

Standard Bank Case Study

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Case study title: PokeAPI coding project 5.

Language used: C#, html and css

Framework: .NET Blazor webassembly

Document purpose:

This document outlines the purpose, setup instructions, and usage guide for the Pokédex Web Application. It provides details on how to install, run, and use the application as well as an overview of its features and functionality.

Pokédex Web Application Documentation

Overview

The Pokédex Web Application is a modern web app developed using the .NET Blazor WebAssembly framework.

Its primary purpose is to fetch and display Pokémon data from the PokéAPI in an interactive and visually appealing interface.

Inspired by the fictional Pokédex from the Pokémon universe, this application allows users to explore, search, and compare Pokémon in a smooth and responsive web experience.

How To Use The Features

Pokémon List: Displays a list of all Pokémon fetched from the PokéAPI. Users can click on the names of the Pokémon to gain more information and data about the Pokémon. This is displayed on a card on the left of the list.

Search Bar: Quickly search Pokémon by name.

Filter Menu: Filter Pokémon by type, ability, colour, shape, habitat and generation.

Pokémon Details Card: Displays full Pokémon information such as stats, abilities, height, and weight after the user clicks on a Pokémon name in the list.

Fight Button/Comparison Mode: Allows users to compare Pokémon under the pretence of fighting against each other and the better Pokémon, based on the comparison criteria, is displayed as the winner. To access the comparison mode the user clicks on the fight button and is then prompted to select a Pokémon. After the first selection a second prompt asks the user to select another Pokémon to fight against. The base stats of each Pokémon and their types are displayed. At the bottom of the respective Pokémon's card, it states which Pokémon won the "battle". If it is a tie both Pokémon cards display a tie.

View Button: To return to viewing Pokémon details while in comparison mode the user can click on the View button, and it will then work the same as when the application is first accessed.

Responsive Design: Works seamlessly on both desktop and mobile screens.

Project Setup

Requirements:

- .Net SDK 8+
- Visual Studio 2022
- Internet access
- Internet browser

Running Locally

1. Clone the repository:

git clone <https://github.com/ZeMushroomMan/Pokedex>

2. Open the project in Visual Studio or VS Code.

3. Run the program

4. Open your browser at <https://localhost:7176/> to access the webpage.

Accessing The Deployed and Hosted version

Alternatively, the entire program is deployed and hosted on Vercel and can be accessed from any modern internet browser at the link <https://pokedex-hosted.vercel.app/>

Technical Details

Comparison Criteria:

- Pokémon are compared using their base stats and type effectiveness.
- Type advantages are factored in using multipliers based on Pokémon type matchups.
- Total score = (Base Stats + Type Modifier).
- The Pokémon with the higher score wins; if equal, the match results in a tie.

API Handling

All API requests are cached in the local storage of the browser to reduce the amount of API requests to the PokeAPI. If the cached data is older than 30 days it is deleted and new data is fetched. When compared to the source this prevents stale data from being used and remaining on the users device.

Error Handling

The program employs sufficient error handling and edge case testing to prevent any runtime errors and any abnormal behaviour. If errors are encountered, they are handled gracefully and provide sufficient detail to the user. More detail on an error can be found in the developer console of the browser.

Developed By

Muhammad Omar

Built using Blazor WebAssembly, C#, Css, HTML and PokéAPI. Hosted on Vercel .