WDD330 Final Project Proposal: Pokémon Web Application

Project Overview:

The objective of this project is to create a dynamic and interactive web page dedicated to Pokémon enthusiasts. The web page will allow users to explore a wide variety of Pokémon, their types, strengths, weaknesses, and special characteristics. By incorporating interactive features such as search functionalities, a Pokémon favorites section, and external links for detailed information, the project aims to provide a comprehensive resource for Pokémon fans.

Problem Statement:

There is a need for a centralized web resource where Pokémon lovers can easily browse different Pokémon, understand their strengths and weaknesses, and save their favorite ones for easy access.

Why I Chose This Project:

Pokémon has a massive and dedicated fanbase, and there is a wide range of information to explore about each Pokémon. This project allows me to combine my interest in Pokémon with my skills in web development, while creating a fun and educational experience for users.

Target Audience:

- Pokémon enthusiasts.
- People who like video games.
- Pokémon collectors and competitive players.
- New Pokémon fans who wish to learn more about abilities, types, and strategies.

Functions:

1. **Type Search:**
    - Users can search Pokémon by their type (fire, water, grass, etc).
    - A list of Pokémon matching the selected type will be displayed.
2. **Detailed Information:**
    - Each Pokémon type will include a link to Wikipedia with information on strengths, weaknesses, and stats (grass is weak to fire, etc).
    - Stats and abilities will be provided for each Pokémon (base stats, special moves, etc).
3. **Render Detailed Pokémon Page:**
    - The details page will display Pokémon types, powers, and any special characteristics (shiny variants, etc).
    - A page will show detailed information when a Pokémon is selected.
4. **Favorite Pokémon Feature:**
    - Users can "favorite" a Pokémon, which will be saved in their local storage for future visits.

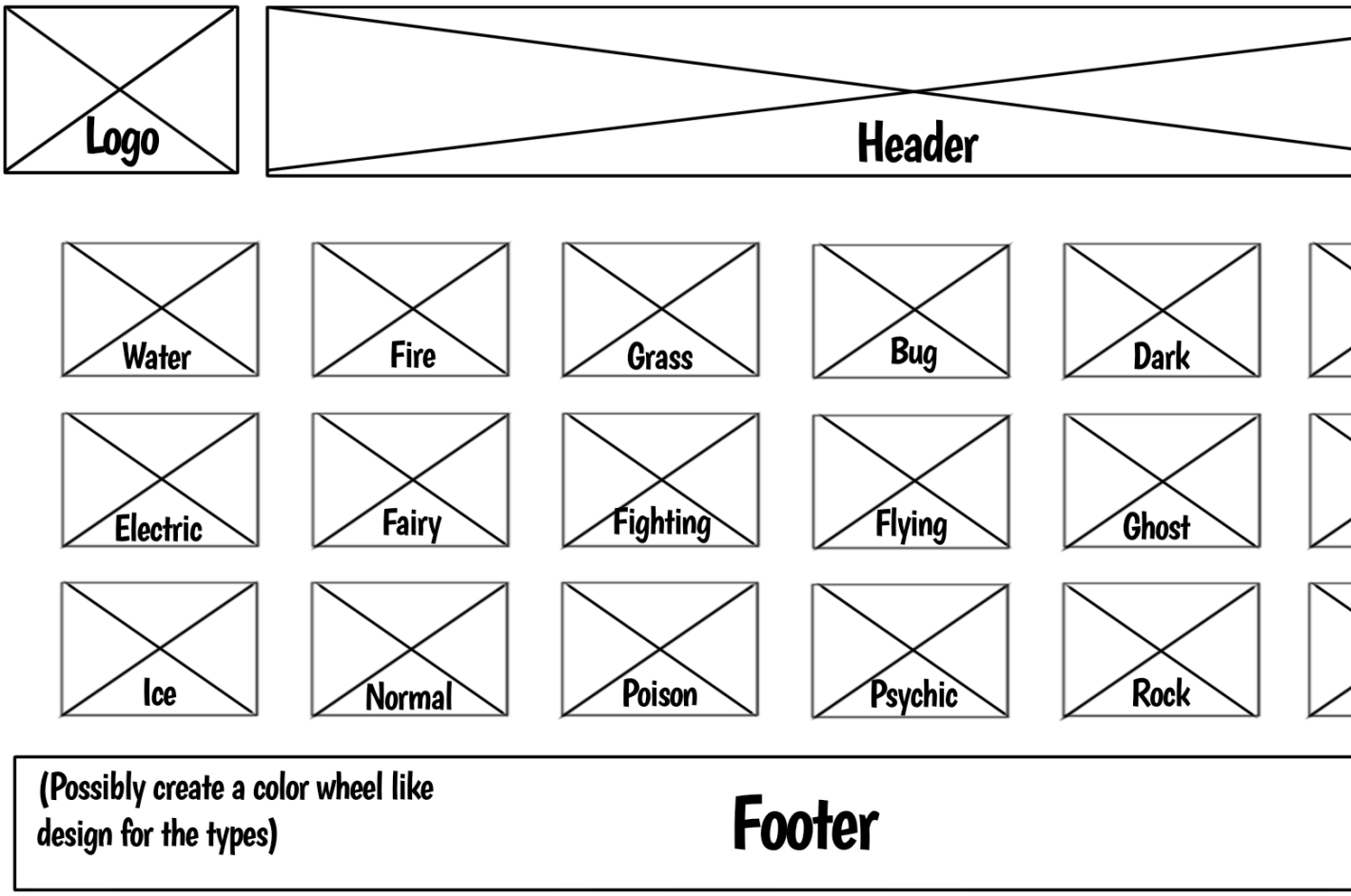
    - A button will allow users to view their favorite Pokémon.
5. **Render Favorite Pokémon:**
    - The app will offer a page where users can view all their favorited Pokémon.

Wireframe:

A rough wireframe outline will include the following sections:

- **Home Page:**
    - Search bar for type filtering
    - List of Pokémon matching the search type
    - Button to view favorited Pokémon
- **Details Page:**
    - Detailed info about the selected Pokémon
    - Link to Wikipedia for more detailed info
    - Button to favorite the Pokémon
- **Favorites Page:**
    - A section that displays all the favorited Pokémon saved to local storage


Logo
Header
Water
Fire
Grass
Bug
Dark
Dragon
Electric
Fairy
Fighting
Flying
Ghost
Ground
Ice
Normal
Poison
Psychic
Rock
Steel
Footer



Data Sources:

- **Pokémon Types API**: A public API that provides Pokémon types.
  - Endpoint: https://pokeapi.co/api/v2/type
- **Pokémon Strength/Weakness API**: The Pokémon who are specifically a certain type, along with their strength and weaknesses.
  - Endpoint: https://pokeapi.co/api/v2/{type_name}
- **Wikipedia API**: Links to Wikipedia pages for Pokémon that lets you learn more about that Pokémon.
  - Endpoint: https://en.wikipedia.org/api/rest_v1/page/summary/{pokemon_name}
- **Local Storage**: For saving the user's favorite Pokémon data on the client side.

Styling:

- **Colors:**
  - Primary Colors: White, Red, and Blue
  - Secondary Colors: Light greys and whites for background and text.
- **Typography:**
  - Title font: Roboto or Itim.

    - Body font: Arial or Helvetica.

Schedule:

Week 1:

- Set up project structure:
    - Create the index.html file with basic headers and footers (wireframe structure).
    - Set up the base CSS file to create color schemes, fonts, and layout.
    - Test pulling data from APIs to ensure correct data is retrieved.

Week 2:

- **HTML and JavaScript files creation:**
    - Develop the home page to allow users to search for Pokémon by type and by name.
    - Implement API calls to display Pokémon data.
    - Add functionality to iterate through Pokémon and display information.
    - Create a button to view favorited Pokémon and link to local storage.
- **Details Page:**
    - Implement JavaScript functions to pull detailed information about a Pokémon, including strengths/weaknesses.
    - Add functionality to "favorite" a Pokémon and save it to local storage.
    - Implement the "View on Wikipedia" button for each Pokémon.

Week 3:

- **Finalization:**
    - Fully render all Pokémon details, including various types and powers.
    - Ensure the favorites feature is fully operational, allowing users to add multiple Pokémon to their favorites list.
    - Add animations and hover effects (such as a Pokémon image carousel).
    - Clean up layout, fix any white space issues, and finalize the project's overall design.
    - Test across multiple browsers to make sure it functions in different places.

Trello Account:

- **Trello Board Link:** WDD330 Final Project - SSonderegger | Trello