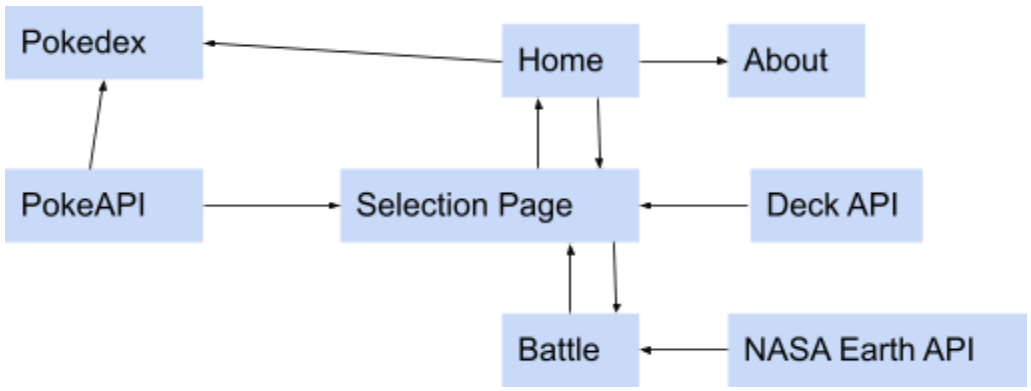
Secure Bathtub Design
PM: Aaron Contreras
Devos: Alejandro Alonso, Edwin Zheng, Tina Nguyen

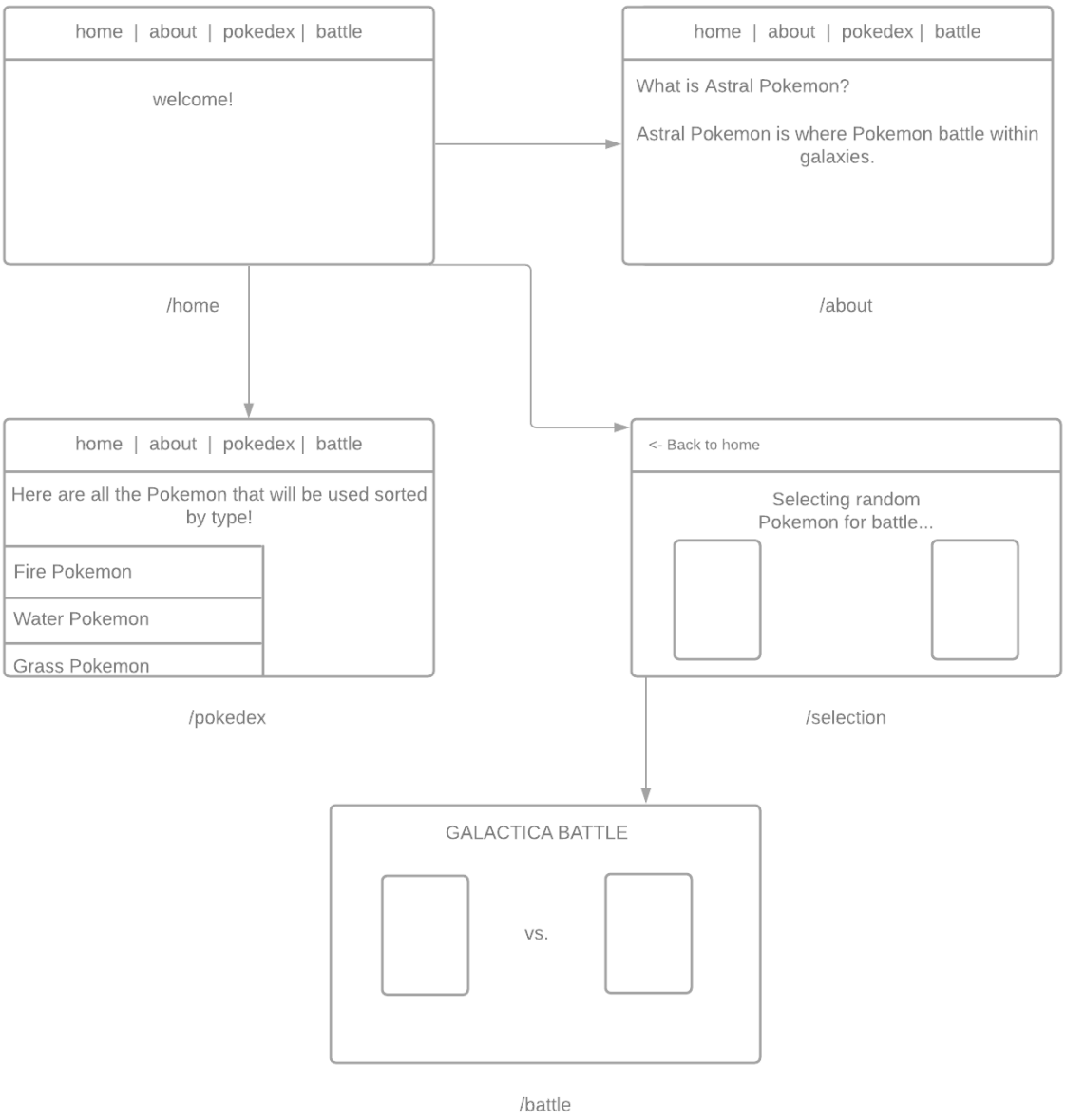
General Design
Website to put two pokemon against one another using DECKAPI, POKEAPI, and the NASA APOD API

Program Components:

1. Choosing Pokemon
    a. Fetch 52 set pokemon from PokeAPI
    b. Initially we will select one Pokemon at random from the set to battle a randomly selected opponent using DeckAPI.
2. Fighting
    a. Takes pokemon selected and simulated fight against a different pokemon

Site Map:





- /home
    - Home page with top navigation bar
- /about
    - Information about the website
- /selection
    - Selection page for where random Pokemon will be chosen
- /pokedex
    - Has an accordion with all Pokemon sorted by type
- /battle
    - Battle page with NASA API's random background

- Pokemon will battle here

Important Notes

Front end will be constructed with: BOOTSTRAP

Why? Our frontend will not require overly complicated CSS, and thus the easy-to-use Bootstrap better serves our needs.

API Usage

- We will use Deck API to assign Pokemon to cards (ex. A joker card represents Ditto) so that we could randomly pick Pokemon to battle each other.
- NASA Earth API will be used to generate a random background for the battle. For the layout during the battle, the Pokemon will be displayed on cards, and a random galaxy will be the background.
- PokeAPI will be used to retrieve data for each Pokemon. The data that we would retrieve would include moves for every Pokemon and Pokemon images to display on the card.

Questions

Does DECKAPI have a "hand" tool (i.e. to have multiple pokemon)?

User Steps

1. "pokemon" class with the following inputs and attributes
    a. Inputs
        i. Name
        ii. Type
        iii. Power ranking
    b. Attributes
        i. Represent as card name for DECKAPI
        ii. Inputs
        iii. Image src url
2. 52 pokemon and their power ranking (hardcoding)
    a. 13 Types, 4 Pokemon per type
    b. We would decide each Pokemon's power ranking on a scale of 1-10 based on its weaknesses, variety of moves, and general strength
3. Use DECKAPI to shuffle and deal out a random pokemon
4. Pokemon battle using a random move of theirs chosen from the POKEAPI
    a. Pokemon sprites (a sprite is an image of the Pokemon) are selected from the POKEAPI
    b. Pokemon sprites are set on stage (background) selected from NASA APOD API
    c. "Announcer" announces pokemon names, types, and trainer names

    d. Winner is decided POTENTIALLY by ML algorithm
        i. If not based on power ranking
5. User can play again with new pokemon (use DECKAPI to cast aside old “cards”)

Page Contents

- ☐ Homepage
    - ☐ Navbar
        - ☐ Home
    - ☐ Title
    - ☐ FIGHT button
        - ☐ To battle page
    - ☐ Accordion
        - ☐ How to play
        - ☐ Pokemon
            - ☐ Images with clickable names
                - ☐ Link to https://www.pokemon.com/us/pokedex/{{name}}
        - ☐ About us
        - ☐ About astromon
    - ☐ Footer
- ☐ Selection Page
    - ☐ Navbar
        - ☐ Home
    - ☐ View opponents chosen pokemon
    - ☐ View 5 presented pokemon
        - ☐ Select one
- ☐ Battle
    - ☐ Navbar
        - ☐ Home
    - ☐ _____ vs _____ in big letters
    - ☐ Pokemon images on opposite sides (left/right)
        - ☐ Top corner? Bottom corner? Middle?
    - ☐ Declares winner/loser
        - ☐ Explosion gif on one of the pokemon
        - ☐ Text to certify
        - ☐ Next Round Button
            - ☐ Routes back to

Tasks:

Alejandro (Devo):

- Pokemon Class

Aaron (PM):

- API Management and design

Edwin (Devo):

- HTML
    - Integrating Battle, selection page, and homepage

Tina (Devo):

- HTML for homepage + selection