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SoftDev1 pd07
P02 -- The End
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Pokemon Dungeon

Description

Pokemon 2D Dungeon Explorer. The classic game of pokemon. You choose a starter out of three different pokemon, and using that pokemon you battle wild pokemon and trainers to level up.

Basic Features:

- Signup/login
- Choose a starter Pokemon
- Walk around on a map (minimum grassy field)
- Encounter Pokemon
- Battle Pokemon
- Capture Pokemon
- Get items (drops from Pokemon battles)
- Feed/Heal your Pokemon

Possible Extra Features:

1. Use the Poke API to create a pokedex with all the possible pokemon and basic stats.
2. Evolution- Get up to a certain level
3. Add a tamagotchi feature. Where you can choose a Pokemon pet and level it up by feeding it food and playing with the pokemon.
4. Add buildings to enter in (a store to buy items, civilian houses, pokegym)
5. Use weather of the current location to determine what pokemon appear. (ex. If it is raining the chances of water type wild pokemon appearing increases by a certain percentage) <- uses user ip to find weather of that location

Overview of Components:

- APIs:
    - **Poke API**
        - Used to find pokemon and their stats.
    - Extras:
        - **IP API:** Used in conjunction with python to find the location of the user based on the ip address of the user (only if the user has given permission)
        - **IPIFY**: Can give easily gives us the client's IP address. We have used this API in conjunction with IPAPI to get the client's location in longitude and latitude form.
        - **Dark Sky API**: Weather API used to retrieve data for the user depending on the user's location

- SQLite Database
    - Users will have a username and a password as well as their x and y coordinates to store their location.
    - Every move in Pokemon will have a name, the number of uses it has left and the max number of uses that move can have, and the damage that that move does to the enemy.
    - All items will have a name, a number representing how many a player has, and the id of the user who owns that item.
    - All Pokemon will have a name, description, type, moves, id of the player that owns it, if the player current has the specific Pokemon in their roster of 6, the level and experience points, and the health.
- Bootstrap: Front-end CSS

Why Bootstrap?

-most of the members are adept at using bootstrap already
-documentation for bootstrap is easier to read, making it easier to use
-bootstrap is much easier to theme (especially with our low time limit)

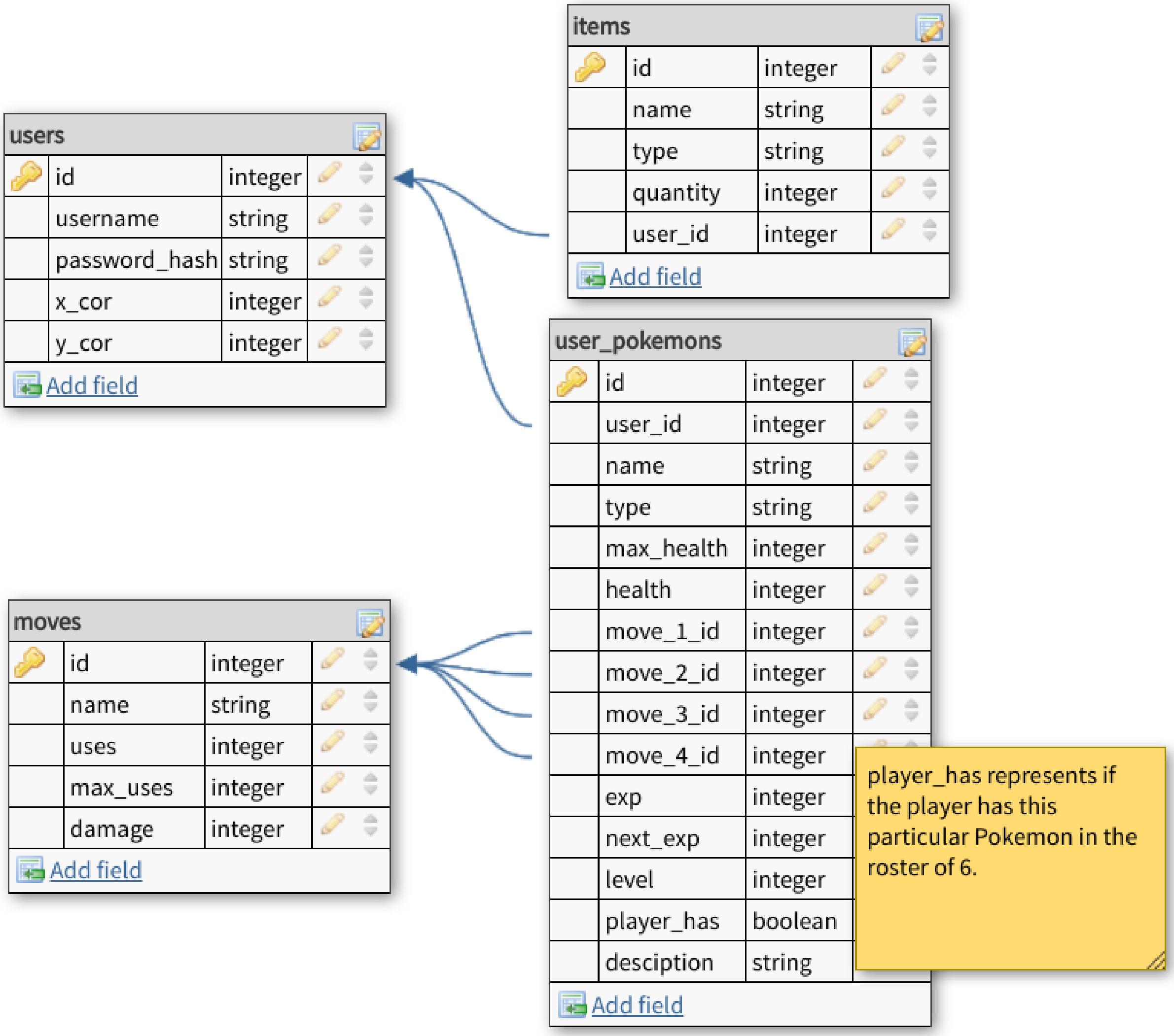
Breakdown of Core Tasks:

Alex	Project manager; Signup/login; weather affecting pokemon occurrence
Jason	Pokemon trainer movement on map; encountering pokemon; database
Karen	Pokemon setup; feeding and healing
Imad	Battle Pokemon; Capture Pokemon; item drops

Timeline:

01/08/2018	Fix design doc
01/09/2018	Login/signup; create database; CSS
01/10/2018	Starter Pokemon; movement on map; Pokemon battle
01/11/2018	Catch-up day
01/12/2018	Capture Pokemon; Item drops; Tamagotchi feature; weather effect
01/13/2018	Fine-tune code
01/14/2018	Review code

Database Schema



items

🔑	id	integer
	name	string
	type	string
	quantity	integer
	user_id	integer

Add field

users

🔑	id	integer
	username	string
	password_hash	string
	x_cor	integer
	y_cor	integer

Add field

user_pokemons

🔑	id	integer
	user_id	integer
	name	string
	type	string
	max_health	integer
	health	integer
	move_1_id	integer
	move_2_id	integer
	move_3_id	integer
	move_4_id	integer
	exp	integer
	next_exp	integer
	level	integer
	player_has	boolean
	desciption	string

Add field

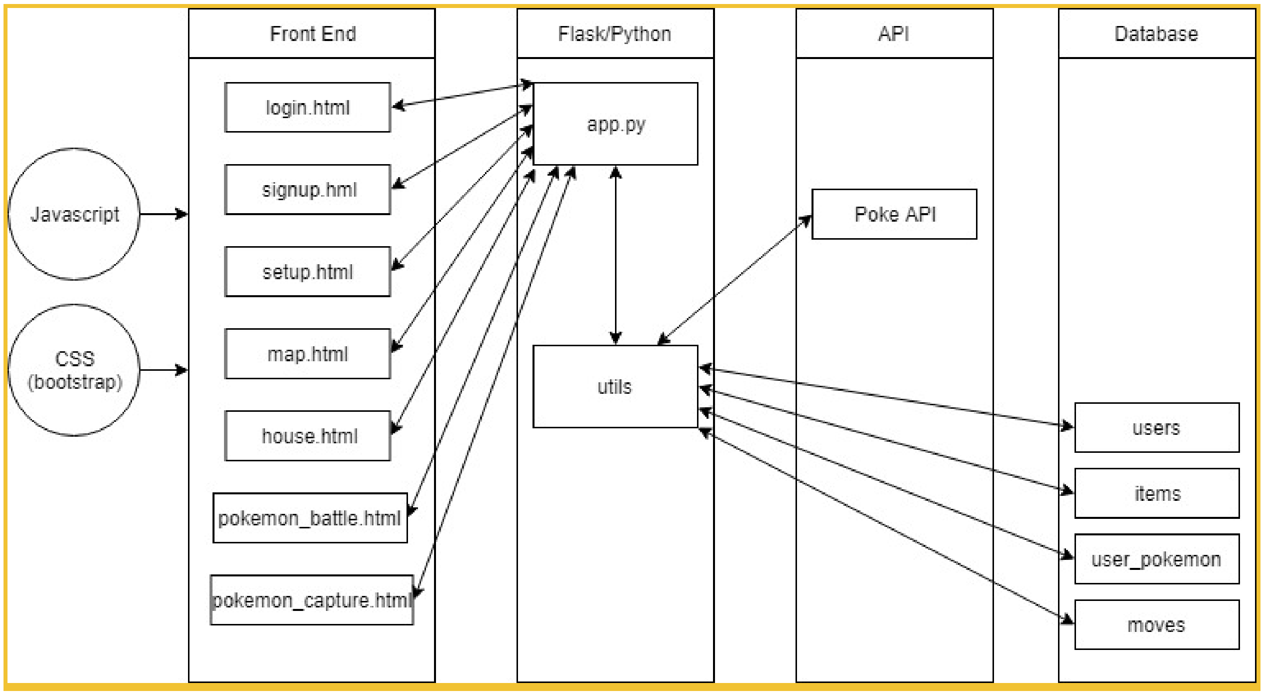
moves

🔑	id	integer
	name	string
	uses	integer
	max_uses	integer
	damage	integer

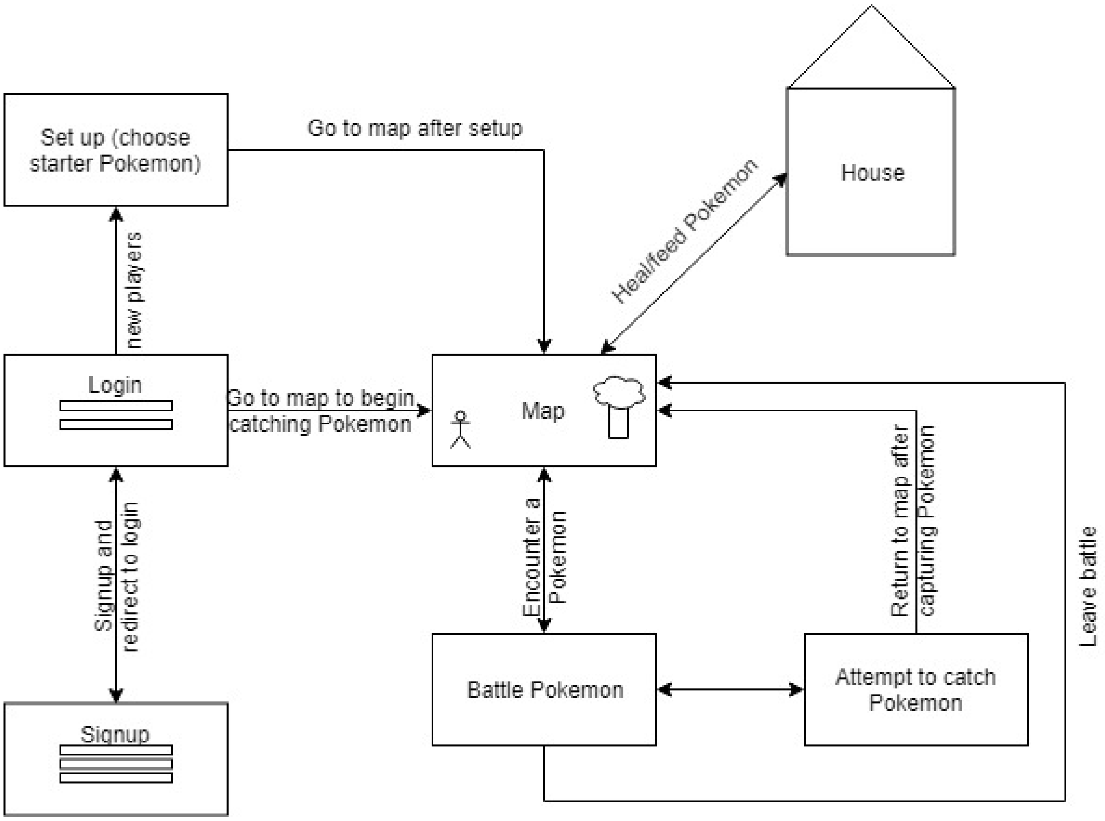
Add field

player_has represents if the player has this particular Pokemon in the roster of 6.

Component Map



Front End Site Map


Set up (choose starter Pokemon)
Go to map after setup
House
Heal/feed Pokemon
new players
Login
Go to map to begin catching Pokemon
Map
Signup and redirect to login
Encounter a Pokemon
Return to map after capturing Pokemon
Leave battle
Signup
Battle Pokemon
Attempt to catch Pokemon