

Final Project Proposal "I do"  
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Good eveening, gentlemon! Our project will be a terminal-based Pokémon battle simulator. This battle simulator will be modelled after the online Pokémon battle simulator *Pokémon Showdown* (see <http://play.pokemonshowdown.com>). Since it's terminal based, the goal will be to keep it as simple as possible without losing any core game mechanics. Due to time constraints we will only code the most crucial of all game mechanics first:

MVP:

- A class for each Pokémon (a dozen minimum, more if there is time)
- Each Pokémon will have 4 moves
  - Stored as instance variable Strings
  - Inherits abstract from superclass to prevent glitching
- Each Pokémon will have their own unique base stats, possible moves and types based on the actual game.
  - Also instance variables, ints or Strings depending on what it is
  - Also inherited from superclass
- Will utilize the official Pokémon battle mechanics (as of gen 7)
  - Damage formula
  - Type effectiveness
  - Turn order
- Will have an option to generate a Pokémon of your choice (or random) against a random opponent
  - Store names in an array, having the user pick one.
  - If the name is not in the array, pick randomly
- Uses ASCII Art and relevant text to make information both clear and pretty with the best graphics in the world.

Provided we have the time, we would like to add plenty more features such as:

- Each Pokémon will have their own nature, EVs and IVs, and ability (based on the real game values)
- Incorporate held items
- Customize your own Pokémon for battle (choose your own ability, EVs, IVs and item) rather than forcing the user into a predetermined battle set

- Player can throw pokeballs to try and catch Pokémon (only 10 pokeballs).
- Allow for teams of Pokémon rather than just single Pokémon battles (cannot use pokeball in this version).
- Option for special battle types (double, triple, rotation, inverse, etc.)
- Difficulty settings (harder difficulty = stronger opponent).
- **Very** basic AI (This can be checking for smarter moves for harder difficulties)
- 2-player functionality