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Initial Project Proposal for CSE 20212-01

Proposal

For our project, we intend to design a new version of the popular video game Pokemon.

Solution

For implementation, we intend to start with the Elite Four, the “final boss” of the game, and work backwards as far as we are capable. Starting in this manner, we will be able to implement most of the primary game functions (player movement, battle, items, etc.) early on. If we are able to accomplish this quickly, the game is easily backwards scalable, adding things like additional areas, wild pokemon, more CPU characters, character progression, and more complex end-game requirements, to name a few.

We plan on structuring our game within a single master “Game Manager” class that controls the game. Both player and CPU characters will be controlled by a general “trainer” class that is composed of “pokemon” classes, a “backpack” class, and possibly an “information/statistics” class. We likely will need some kind of “environment” class to control the playable area of the game, with different sub-classes/functions to provide information about the area such as random encounters, background music, etc.

Concerns/Special Needs

None of us has a ton of experience with OpenGL, so we could use advice on how to implement a graphics-based system and what graphics software we should choose.

We feel pretty confident in the scalability of our approach, expanding the game one mechanic at a time for as much time as we have available. Any thoughts you have on the overall feasibility of this approach would be greatly appreciated.