Final Project Proposal
Oregon Trail

===Main Idea===

The year is 1851. You are a settler going out westward with dreams of a new life out in the American frontier. But will you and your family manage to survive the hardships of the Oregon Trail, and make it out to fulfill your destiny?

The Oregon Trail is a simulation that allows the player to play the role of a person going out west in search of a new life. Choices made by the player during his/her travels heavily affect the gameplay. The player's main goal is to make it from Independence, Missouri, all the way to Oregon City, Oregon (hopefully your family as well).

The player is allowed to customize their character and family and choose preconditions before the journey begins. One of these prerequisites made is choosing an occupation. Each occupation comes with their own advantages/disadvantages, which will impact gameplay. Another decision to be made is choosing supplies to bring along for the ride. Other decisions may be added before the expedition starts.

The player than begins his/her journey, where they'll have to deal with rationing, when to rest, and other hassles of a migrating settler's life

===Some Things to Consider===

- *Hunting*
  In order to survive the journey, the player must be able to provide food for their family
- *Defending from attacks*
  Bandits are along the trail, making the trek a most difficult one. The player must be able to fend off attacks if they want to make it to Oregon City in one piece
- *Currency*
  Money = Supplies = Survival = OREGON CITAAAYY
- *Stores/Landmarks*
  Where the player can buy food and supplies, as well as sell items to buy more necessities.
  They can also find some cool stuff too
- *Diseases/Mishaps*
  Measles, dysentery, typhoid, cholera, exhaustion, broken wagon… the usual...

<p align="center">===Some Topics to Incorporate===</p>

FOR loops and Recursion
~ Main way for running the game
~ Condition is to run the game until the player reaches the end or when an untimely death happens
~ Run store until player is done with transactions

Arrays
~ Store different landmarks: landmarks are different towns
        Player progresses through this array until the last town (element) is reached
~ Store different ailments: helps in randomizing inhibitors for gameplay
        E.g "You now have typhoid" or "Your wheels have broken down"

Inheritance (Subclasses and Superclasses)
~ Character creation
        Each character has health, name, and an integer regarding a type of sickness
        Abstract in order to ensure same types of "stats" for each character

Separate classes
~ Store: where the player can buy and sell supplies
~ Town: where the player can access the store as well as other options like trading
~ Character: creates characters
~ Player: stores the supply variables for the game as well as being a Character of its own

<p align="center">===MVP===</p>

When the game starts up, there is a start menu with the options of starting the game and seeing the credits. Starting the game will prompt player and party creation. The player decides their own name as well as their party's names. Then then must choose how many of each type of supply to bring given a certain amount of money. Finally, they can start the game.

The game then continuously loops to run. The player has the option to rest in order to hunt for food, trade with other emigrants, etc. The game keeps looping until either the player dies along with the party or the player reaches their destination.

At the end, a score is tallied up based on how much of each supply is currently owned and the health of each party member.