## Final Project Proposal StuyTrail

We are trying to recreate the popular <u>text-based adventure game</u> "Oregon Trail." Rather than taking place on the Oregon Trail, our players will become students trying to make their way to Stuyvesant, while encountering random events (that can either help or hurt the player), such as subway delays, lost ID cards, etc.

We will be incorporating: list generation, randomness, the scanner, searching methods, and an understanding pass-by-value.

List generation will be important for representing the choices and inventory of the character traversing to Stuyvesant. Keeping track of potential choices and available items throughout the game. We can also use sorting algorithms to organize the player's inventory.

Randomness is very important for the StuyTrial as, in the classic game Oregon Trail, randomness (and some player skill) determines which problems the player encounters (such as in Hw38).

The scanner is vital to the interaction of the player and the code and generally relies on some basic keyboard inputs for the player to select their choices (y/n,1,2,3,4 etc.)

Other smaller topics such as the Binary Search, can be incorporated through minigames and player interactions with the world (e.g., if u can guess the time the train arrives in five tries you get a dollar).