Foraging Simulator - Progress Report

CART 253 Project 2 By Jackson Dunnigan

Reflection:

Overall, I've enjoyed working on this project quite a bit; especially because I get to make something I'm passionate about. I'm most proud of my generation algorithm especially the mushroom spawning. I've definitely had some trouble with player collision and making the program run well. I kept getting framerate drops but hopefully it's smoother now. At the moment, the game is bare bones, but there's lots of potential and I'm planning to add many more features within the due date.

Progress:

Since the proposal, I've added and reworked a number of features. With the most prominent being:

- Mushrooms
 - Added a mushroom class with over 20 species
 - A mushroom generation system for field mushrooms
 - An alternation generation system for trees, logs, and stumps
 - Mushrooms spawn in clumps similar to real life
 - A classification system for mushrooms (sorts by family and genus)
 - The ability to pick up mushrooms
- Sound Effects
 - Walking sounds
 - o Menu sounds
 - Picking up sounds
- Foraging Guide
 - Added a book class
 - interact with it by clicking the bottom right
 - o The book will soon store mushroom classification information
- Map Generation
 - Reworked generation to allow for bigger maps without slowing down the computer
 - Reworked drawing so it only draws the tiles near you as opposed to every tile being drawn at once
 - Moved repeated operations with spawning into functions

Future Plans:

- Foraging Guide
 - Pages you can scroll through
 - Functionality allowing you to identify mushrooms by key characteristics such as: color, shape and smell
- Day and Night
 - Day and night system

- The ability to "set up camp" and sleep for the night.
- Hunger/Health System
 - o Hunger bar which you must eat mushrooms to keep it up
 - o Health bar which depletes if you eat poisonous mushrooms or are starving
- Menus
 - o Main menu
 - o The ability to pause
- Enemies / animals
 - o Enemies that come out at night
 - o Squirrels and frogs to add ambience