**Name of game:** The Hunt for the Golden Roll

**Name of developers:** Aidan Beeching, Thomas Riffaud

**Target age:** Aimed at high school students and older but could be reasonably played by anyone who is willing to learn Linux.

**Purpose of game:** In the context of the assignment, the purpose of the game is to familiarize users with the BASH shell. This includes, but is not limited to, learning how to view files, navigate the filesystem, manipulate files (such as through copying and moving), using variables in the shell environment, using utilities such as grep, pipelines, and using help pages.

**Narrative:** In the year 20XX, an unprecedented toilet paper outage\* has been occurring across the state. It is the player’s job to journey out of the state to find a roll of toilet paper (think something along the lines of *Oregon Trail*, but set in a modern era).

\*This is a work of fiction. Any resemblance to actual events is purely coincidental.

**Instructions:**

* Purpose - Your goal is to find the stockpile of toilet paper hidden away in a bunker by inputting Linux commands into a fake GPS. The GPS is a framing device for the Linux/BASH shell.
* Constraints - Game is played entirely within the command line; only commands available in Linux are allowed.
* Conflict - You are running out of toilet paper, and you need to find some.
* Intrinsic/extrinsic rewards - In the context of the game, you are awarded with more progress and some quirky dialogue here and there. Outside of the game, you become more familiar with Linux/BASH shell concepts. Namely, you begin to feel more comfortable navigating the filesystem through the command line and manipulating files.
* Growth - The game expects you to become familiar with the concepts presented in earlier segments, and by the end of the game you make use of the commands that you have learned prior in order to unlock the door into the bunker.
* Winning condition - You find the stockpile of toilet paper by unlocking the bunker door, and you win the game. You find a golden roll of toilet paper that you take back with you.

**List of Concepts & Skills Learned:**

* How to view a list files using the “ls” command, and using the -a option to view hidden files
* How to view the contents of files using “cat”
* How to view the current working directory using “pwd”
* How to change the working directory using “cd” and navigate to a previous folder using “..”
* How to create folders using the “mkdir” command
* How to create files using the “touch” command (without going into Vim)
* How to copy files using the “cp” command
* How to move files with the “mv” command
* How to use grep to search for patterns in text (i.e. output of ls, cat, etc.)
* How to use du to find the disk space usage of files
* Using head and tail to return only portions of a text
* Using special characters in command
* Basic input redirection using /dev/null

**Miscellaneous comments:** Neither of us really have much experience in creating large-scale fantasy games and using game engines like Unity and such, so we ultimately opted to design a short, small-scaled game in BASH. For most “areas”/levels, scripts are used to ensure that the player has completed the task required of them. This ensures the user understands the concepts we are trying to show them before moving on, since future levels build off of concepts taught in previous levels. Ultimately, the game is a short and (hopefully) quirky adventure that presents Linux BASH concepts in a fun way.