**Outline**

Play the original Nethack game to establish a mind-set around basic computer game and programming concepts. Research the history of “rogue like” games. Decompose the Nethack game from perspective of input/output devices and processes.

**Objectives**

* Icebreaker activity to establish community and classroom norms.
* To realize that computers have evolved to take various forms in modern society.
* To begin thinking about computers as a collection of input/output devices and processes.

**Materials & Resources**

* Online Nethack: https://alt.org/nethack/

**Part 1: Playing The Game**

1. Play the Nethack game until you have a character that has survived for more than one dungeon level.  
   1. How many levels have you reached so far?
   2. What character type are you?
   3. How many times (deaths) did it take you to get this far?
   4. What are some of the monsters you have encountered and how are they represented?
   5. What are some of the special objects you have encountered and how are they represented?
   6. What are some of the commands that you use most often?
2. Compare the Nethack interface to modern computer games:  
   1. Does the primitive character based display limit the game play (Explain)?
   2. Does the primitive command based input and control limit the game play (Explain)?
   3. Is the Nethack game less complex or more complex than modern computer games (Explain)?
3. Compare the Nethack gameplay level to modern computer games:  
   1. Is the gameplay easier or harder than modern games (Explain)?
   2. Nethack is an example of a “Turn Based” game. Would it be better of the monsters moved in real time (Explain)?
   3. Nethack is an example of a “single player” game. Would it be better if the game was played in a multi-player world (Explain)?

**Part 2: Analyzing The Game**

Create a presentation on:

1. Think about what you would have to do to create a game like Nethack, focusing on the following questions:  
   1. User Interface - Input
   2. User Interface - Output
   3. Game Levels / Maps
   4. Game State
   5. Game Logic / AI
2. Think about what you would have to Learn  
   1. About the game specification
   2. About programming in Java