

Pseudo-codes for all aspects of the game, "Cat and Conquer"

// Game Format/Game Plot (Introduction to End Game) //

1. Invasion

- A. Stupid Ugly Dogs on Earth working with Invaders (Villains: Rats)
- B. Ugly rats on Earth were alien invaders preparing for alien invasion, and destruction of Earth.

2. Response

- A. Earth's Dilemma (discovery of invaders)
- B. Earth's Solution (recognition of cats heroic deeds and training centuries old)

3. Lift Off

- A. Space Cats (Hero)
- B. Space Station Orbit .gif
- C. Flight or Fight

4. End Game

- A. Game Over
- B. Rat Boss Game Over
- C. Level Won
- D. Medal of Honor
- E. Pause-to-Quit
- F. Pause-to-Break

// What are the rules of the game? //

1. Movement

- A. Hero's Movements: Strike the rat!
 - i. Users can move the cat left and right with the arrow keys.
 - ii. Users can press the spacebar to shoot a projectile.
 - iii. If the player (Hero) shoots a mouse (Villain), the mouse is destroyed and deleted; and the player gets a point.
 - iv. When there are no more Villains, the Hero wins the level; and proceeds to the next level/wins the game (if there are no more levels).

B. Villains' Movement

- i. Dodge the cheese.
 - a. Villain can approach the hero, from random locations, of the X and Y axes (horizontal and vertical movements along screen, including diagonal movements).
 - b. If the Villain shoots the Hero, the the player (Hero) loses a life.
- ii. Do not let any rat pass.

- a. Mice fall from the sky at random locations.
 - b. If a mouse reaches the bottom, the player loses a life.
- iii. Once a player reaches 0 life, they lose.
- 2. Save planet Earth!
 - A. Do not let the Villain pass/destroy Hero, and invade planet Earth!
 - B. Do not let the Villain pass/destroy Hero, and blow planet Earth up!

// How does that translate into code? //

- 1. Conditional statements are needed.
- 2. Variables (Var) must be introduced; and properly scoped/identified.
- 3. Parameters must be clear.
- 4. Certain Var and functions may be repeated and/or copied.

// Will you need to use loops? If/else statements? //

- 1. Loops are needed for weapons
 - A. Villains'
 - B. Hero's
- 2. If/else statements are needed for Weapons
 - A. Villains'
 - i. Standard
 - ii. Upgrades
 - iii. Strike/Miss
 - B. Hero's
 - i. Standard
 - ii. Upgrades
 - iii. Strike/Miss
 - iv. Downgrade (loss of life)
- 3. If/else statements are needed for Levels
 - A. Completion
 - i. Standard Level
 - ii. Boss Level
 - iii. Bonus Level
 - iv. Final Level (End Game)
 - B. Incompletion
 - i. Standard Level
 - ii. Boss Level
 - iii. Bonus Level
 - iv. Final Level (End Game)

// What variables will you need? //

- 1. Hero (define)
- 2. Villain(s) (define)
 - A. Single

- B. Multiple Party
- C. Boss
- 3. Weapons (define)
 - A. Villain(s) (define)
 - i. Single
 - ii. Multiple Party
 - iii. Boss
 - B. Hero
 - i. Standard/initial
 - ii. Upgrades

// Under what circumstances will your variables change? //

- 1. Variables will change by result(s) of:
 - A. Functions
 - B. Loops
 - C. Conditional Statements
- 2. Variables will change by re-assigning:
 - A. Global Variable
 - B. Local Variable