**Project Description:**

For my term project I plan to make a player vs. player game called Cats vs. Cats (still thinking of other possible names) because I love cats and today, August 8th, is International Cat Day!

In Cats vs. Cats, the user will play as a cat knight and the objective will be to beat the evil cat boss. The boss will become increasingly more difficult to beat each level.

**Structural Plan:**

* File for OOP classes (Player class and Boss class)
* File for minimax algorithm
* Functions will be grouped into Model/View/Controller

**Algorithmic Plan:**

The movement of the player will be determined by user input through the key presses.

The movement of the boss will be determined using an AI algorithm (minimax) which will allow the boss to perform the best move given the action of the player. Minimax is a recursive algorithm that utilizes the best template. This means that it will go through all the possible ending states given a move and decide the best move for the boss to make.

**Version Control Plan:**

I will use GitHub to back up my code

A screenshot of a computer

Description automatically generated

**\_\_Updates\_\_**

TP2 Update:

* Implemented level changes and proper win/lose condition; player wins if they beat the boss on all three levels
* Added dodge feature; boss cannot attack while dodging
* Created a minimum distance requirement for player to be able attack
* Made boss moves back and forth randomly
* Increased level difficulty by dividing the player attack value by the current level

TP3 Update:

* Added Help/Instructions Mode
* Added text that tells when boss is attacking
* Created a recharge time for the player attack with the biggest damage; biggest attack can only be used every 10 seconds