2D Martial Arts Game

You are a martial artist, trapped in a dungeon. Survive as many waves of enemies as possible.

- **Waves:** The game operates in a wave based combat system. Essentially combat continues until the full enemy array is emptied. Difficulty is therefore based on attrition; losing should be the result of multiple incremental mistakes. The waves will keep coming as long as the player survives, as each wave is simply comprised of x amounts of each unit, where x is the wave number.
- **Difficulty:** The player can choose easy, medium, or hard difficulties. The only things these affect is the rate at which new enemies are spawned.
- **Combat:** the screen will be divided into a grid of four to six cells. Enemies will appear in random cells and attack or take some other action on a timer depending on their attack speed. Before taking any action, the player must change the targeted cell with the arrow keys. For example, if X's represent enemies and O's represent empty cells,
     O | O
     O | X
  the player would have to navigate to the bottom right cell in order to attack or block that unit. Reinforcements will come every X amount of seconds, appearing in random cells, where X depends on the difficulty. The initial enemies will always be a randomly chosen pairing of two different units. After this, enemies will spawn in on a timer.
  - **Stamina:** every attack costs stamina and it takes stamina to block. Stamina is recovered at a slow rate passively, but you can press a button to enter meditation mid fight to recover faster.
    - You can only block if you have stamina, and you can only block if you have more than 10 stamina
    - You can only attack if you have stamina greater than or equal to the cost to execute the attack
  - **Attacks:** there will be three different attack types, each of which can be upgraded based on pickups. Once an attack is executed, you must wait its attack time before the damage is done. Damage will be done to whoever is in the cell you are targeting. In this time, you can cancel the attack, but you will suffer a stamina penalty.
    - **Punch:** basic attack, average damage, average speed, average stamina

- Chop: fast attack, low damage, average stamina: meant more for quick burst damage, meant to be stamina inefficient so the player doesn't just spam this
- Headbutt: slow attack, average damage, high stamina, STUNS the target, cancelling their action. Riposting with this to cancel an enemy attack is meant to be a powerful defensive option
  - Defense: Defense will happen in a block and parry/riposte system
    - Block is held: simply enter a block input and whatever damage while you are in that mode will be converted to stamina damage
    - Parry/Riposte: if you target your attacker and input your block 0.5 seconds before the attack, you will have a 1 second window where your next inputted attack will take half the usual attack speed to execute. If you take too long to input your attack you will lose the bonus. The window for each will be represented by the color behind the player fading out from blue for parry then red for riposte, lasting for time equivalent to the actual windows
  - Healing: the player will heal to full between waves. I was considering implementing some healing mechanics but didn't get around to it.
  - Basic enemy types: right now I will have pre-set enemy formations, with enemies spawning in randomly after a certain amount of time in the fight has occurred
    - Samurai: basic enemy type, average damage with average speed.
    - Ninja: high speed, low damage.
    - Oni: uses a kanabo, low speed, high damage (prone to stuns)
  - Advanced enemy types: I did not have time to implement these but they were not going to appear in starting formations until after the player has passed a wave or two. They will only appear in reinforcements after the first "wave".
    - Buffer: guy with megaphone that shouts motivational quotes to increase the damage or health of his comrades.
      - If the only enemy type in a given encounter is reduced to buffers, they will only use a skill which decreases the amount of time for reinforcements
    - Berserker: begins with samurai's stats, becomes faster and stronger as more of his allies die. Pairing this guy with security guards and a buffer could lead to a difficult encounter.
- Power-ups: I wasn't able to implement these but the idea was that they would take the form of a generic upgrade which the user can apply to any preferred attack type.

- These generic upgrades will take the form of speed, power, and stamina reduction buffs. The user will pick it up then select which attack type they would like to permanently buff.
  - In order to not break things, I should probably implement a cap for each attribute ie so you can't have instant speed punches or something like that.