Battle Mechanics Concept

This document goes over the concepts of the battle mechanics. This is not a design doc for the code, just the game design ideas.

Stats:

Assassin:

* Attack: Extra High, High, Mid
* Speed: Extra High, High, Mid
* Defense: Mid, Low, Extra Low
* Health: Mid, Low, Extra Low
* **Assassin Design**: the assassin is designed to go first and do a lot of damage.

Tank:

* Attack: Mid, Low, Extra Low
* Speed: Mid, Low, Extra Low
* Defense: Extra High, High, Mid
* Health: Extra High, High, Mid
* **Tank Design**: tank is meant to combat assassin and take a lot of hits before dying

Fighter:

* Attack: High, Mid, Low
* Speed: High, Mid, Low
* Defense: High, Mid, Low
* Health: High, Mid, Low
* **Fighter Design**: the fighter is a mid ground class. It was designed to just be regular in the middle class.

Healer:

* Attack: Mid, Low, Extra Low
* Speed: Extra High, High, Mid
* Defense: Mid, Low, Extra Low
* Health: Extra High, High, Mid
* **Healer Design**: the healer is able to output a small amount of damage over time. With high speed and high health the healer should be able to heal themselves first because of speed and the high health allows them to survive a bit longer.

High to Low numerical values:

Stats will be set to a extra high, high, mid, low, and extra low

Attack:

* Extra high: 10
* High: 9
* Mid: 8
* Low: 7
* Extra low: 6

Defense:

* Extra high: 5
* High: 4
* Mid: 3
* Low: 2
* Extra low: 1

Health

* Extra high: 300
* High: 250
* Mid: 200
* Low: 150
* Extra low: 100

Speed

* Extra high: 5
* High: 4
* Mid: 3
* Low: 2
* Extra low: 1

Calculations:

This is the damage calculator

Damage = (((attacker's attack - Targets Def) \* 5) \* Any modifiers)

Example damage:

* Attacker’s atk: 9
* Targets Def: 3
* Mod = 1
* Damage would equal 30.

(Modifier will remain at 1 by default unless particularly accessed by a special ability)

Combat Actions and Abilities:

* Implement a capability to miss attacks
* Implement a capability to have attacks crit

General Actions:

* Attack
  + Chance to hit 80%
  + Does 1x damage
* Parry (not implemented)
  + Your enemy attacks first and if it hits
  + You attack immediately back dealing 1.5 damage
* Dodge swipe (not implemented)
  + Reduce chance to hit by 35%
  + Attack doing 10% damage

**These class specific actions are not implemented into the mechanics currently.**

Tank:

* Shield
  + Reduces damage by 75%
  + Deal 10% damage that is taken

Assassin:

* Feint attack
  + Chance to hit 0%
  + Damage 0x
  + Chances to hit 60%
  + Damage 2.25x

Healer:

* Heal
  + Reduce chance of being hit by 20%
  + Increase health by a 1/5 total health

Fighter:

* Double After Attack
  + Chances to hit 50%
  + Damage 1x
  + Chance to hit 40%
  + Damage 1x
  + If both attacks hit you do a 3rd attack that deals 1.5x damage