Documentation for general concepts for our talent/attribute system

* **Attributes**

Attributes will be values that every game character is going to have. They will be used in formulas that get values for different things for example damage output, movement speed, received damage and effect area of magic spells.

**List of Passive Attributes**

* Strength – Determines the damage of strength dependent weapons, lowers the negative effects of weight on movement and critical strike chance. Increases Carry weight.
* Agility – Determines the damage of Agility Dependent weapons, increases critical strike chance, decreases detection rate.
* Intelligence – Determines the damage of Intelligence Dependent weapons, increases efficiency of spells, and training rates.
* Endurance – Determines your maximum health and stamina, as well as how much stamina a single action takes and how much max health you lose after taking a hit (This mechanic is going to be explained in detail later).

**List of active attributes**

* Health – Your current health value, gets lower if you get hit, if it reaches zero, you die.
* Max Health – How high can your health get.
* Wound – Penalty to max health that is proportional to received damage, wound goes away with time, or after resting.
* Stamina - Your current stamina value, gets lower after an action, since all actions require stamina, you won’t be able to do certain things without proper stamina values.
* Max Stamina - How high can your stamina get.
* Fatigue - Penalty to max Stamina that is proportional to stamina that was spent on an action, Fatigue goes away with time, or after resting.
* **Stats**

Stats are properties of wearable items that are going to be used in formulas to determine values of things such as received damage or movement speed.

**Weapons active stats**

* Condition – when it reaches zero a weapon becomes unusable and it has to be repaired. Damage output is proportional to its condition.

**Weapons passive stats**

* Weight – Weapon damage is proportional to Weight, but so is the speed penalty. With higher strength attribute weight penalties are decreased.
* Complexity – Divided into two sub-stats: magical and physical.
* Magical – with high magical complexity it would make it harder for unintelligent characters to operate a weapon (speed penalty), but also this stat is proportional to weapons raw magical damage output.
* physical – with high physical complexity it would make it harder for characters with low agility to operate a weapon (speed penalty), but also this stat is proportional to weapons raw physical damage output.
* Slash – How effective it is to use slash attacks with said weapon.
* Stab – How effective it is to use stab attacks with said weapon.
* Crush – How effective it is to use crush attacks with said weapon.
* Durability – Determines how fast weapons condition goes down as well as its maximum condition value.

**Armor active stats**

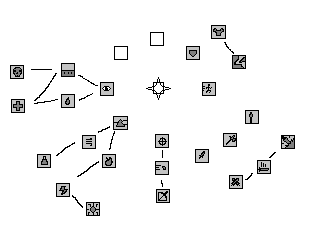
* Condition – when it reaches zero, armor becomes unusable and it has to be repaired. Damage output is proportional to its condition.

**Armor passive stats**

* Weight – Higher it is the better it protects but characters with low strength will have a higher speed penalty.
* Slash – How well armor protects form slash.
* Stab – How well armor protects form stab.
* Crush – How well armor protects form crush.
* Heat resistance – how well it holds up against high-temperature attacks (fire balls, flame throwers).
* Cold resistance – how well it holds up against low-temperature attacks (ice magic, liquid nitrogen?).
* Durability – Determines how fast armors condition goes down as well as its maximum condition value.

This sort of system makes the process of programming much easier because all it would take to create an entire cast of NPCs and playable characters, is to create one working model and then build all characters and monsters using said model as a template but with tweaked attributes and equipment.

* **Talents**

Every action that a player can do is going to be associated with a talent. Effectiveness of an action is proportional to its talents level. After leveling up a talent the player will receive a reward in form of attributes which are associated with said talent. For example, a player was using a bow for quite some time, so they can level up a talent called “Quick Draw” which allows them to shoot from a bow quicker, so by leveling up this talent the time and stamina which it takes to draw a bow is going to be lowered plus they will get an attribute boost: +1 strength, +3 agility, +2 endurance, +1 intelligence. (just an example, attribute rewards will have to be thoroughly discussed.)

Some talents can be trained form the get go and others have to be unlocked by training talents you already have. For example, you can’t use a high level fire spell until you learn a talent called “Fire creation” but to get that talent it requires you to get your “fire manipulation” talent to at least level 3.