**TemporaryEffect Class**

This class is for representing the temporary effects a character currently affected by. Three classes extends this class DamageEffect, NonDamageEffect, StatEffect.

Attributes:

Private duration: duration is an int type it holds the duration of the current TemporaryEffect

Operations:

Public Boolean ApplyEffect(Character C) : ApplyEffect takes a character object as a parameter and changes the effect of the character after completion returns a Boolean according to the success of the operation for example an effect cannot be applied two times than ApplyEffect returns false.

**DamageEffect:**

Attributes:

Private damage: damage is a double type member and holds the value which damage of the character will multiplied with.

**NonDamageEffect:**

Attributes:

Private type: type’s data type is string and hold the values regarding effects such as invisibility, heal etc.

**StatEffect:**

Attributes:

Private StatType: holds a string which states that which skill is going to be changed.

Private amount: holds a double value to hold whichever stat will be changed by the amount.

**Skill Class**

Attributes:

Private name: holds the name of the skill as a String

Private tempEffect: holds a value type of TemporaryEffects this is the effect which when activated skill would provide to the character

Private cooldownStatus: holds a Boolean value false while a skill has recently used and a time needed to pass to use the skill again has not passed yet.

Restrictions: holds a string array for the restrictions. These restrictions are the required mana, the required stamina, and a maximum distance which an attack can be effective at the most.

Operations:

Public boolean Applyskill (Chaarcter c1, Character c2): returns a Boolean regarding the success of the attack c1 is the attacker and c2 is the receiver.

**Class Class**

Attributes:

Private Name: holds a string for the class.

Private baseStats: an int array holding the base stats of that particular Class.

Private Skills: the skills a Class can be use holds an array of type Skill.

Operations:

Public Boolean increaseCharStats(): increases the stats according to the race of the character for example some classes have more strength inherently some are more clever.