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**Inventory System Usage**

The following is a list of all places and ways in which the system to be designed will be utilized. This document will be updated throughout the semester.

Terminology:

NPC – Non-playable character. Can be interacted with within game world.

1. Menu
   1. **Equipment Screen**
      1. Equip items to increase stats
         1. Display slots for equippables
            1. Head
            2. Chest
            3. Arms
            4. Hands
            5. Legs
            6. Feet
            7. Accessories
         2. Allow user to click on one of those slots to view items in inventory which could fill those slots
         3. Allow user to click on an item (or scroll through) to view status effect change for each qualifying item in inventory
         4. Allow user to click on “Equip” to equip said item
         5. Calculate status effect changes
         6. Return to step 1
   2. **Status Screen**
      1. Displays base character stats
         1. Current HP
         2. Max HP
         3. Attack
         4. Defense
         5. More to come...
      2. Displays current stats, after effects of equipped items has been calculated.
         1. Perhaps in “( )” after base character stats
   3. **Inventory Screen**
      1. Player can view Items
         1. Alphabetical order
      2. Description of User interface:
         1. Starts viewing All items. Navigating a panel on the left side of the screen narrows down items based on type, subtype, sub-subtype, etc.
         2. Clicking / pressing a button on this navigation panel on the left makes cursor jump to items in inventory. Cancel button causes it to return to navigation on the left.
         3. Using scroll wheel on mouse while hovering over navigation panel or list of items will cause it to scroll, if there are enough items/options to not fit on the screen.
         4. There is a scroll bar on the right side of the screen for easy
      3. Player can sort Items based on type:
         1. Edible
            1. Ingredients (Used for crafting food / weapons / armor / potions)
            2. Potion
            3. Food
         2. Weapon
            1. Sword
            2. Axe
            3. Bow / Arrow
            4. Wands
            5. Staves
         3. Armor
            1. Head
            2. Chest
            3. Arms
            4. Hands
            5. Legs
            6. Feet
            7. Accessories
         4. Books
         5. Notes
         6. Keys
         7. Materials (Used for crafting weapons / armor / potions)
         8. Misc.
         9. Quest Item
   4. **Abilities/Skills Screen**
      1. May increase proficiency with / enhance effects of equipped items
2. NPC Interaction
   1. **Quests**
      1. Receiving items to aid in quests
      2. Removing items to complete quests
   2. **Shops**
      1. Buying Items
         1. NPCs have their own inventories, either fixed or randomized.
            1. Clicking on an item in the NPC's inventory will:

Display a description of the item

Display cost of item

If item = weapon/armor/accessory

Display stats of the item

Display the potential change of character stats which would result from equipping the item.

* + 1. Selling Items

1. General Exploration
   1. **Viewing/Inspecting item**
      1. Looking at an item in the game world (it is centered on the screen, in crosshairs)
         1. Display Value/price
         2. Display Name
         3. If item is of type Armor
            1. Display Defense
         4. If item is of type Weapon
            1. Display Attack
         5. Instruction to collect item (I.e “Click to collect”)
            1. Instance of item is destroyed in game world, added to inventory.

**Data sets – Inventory Item Types**

1. **Item (Main Class)**
   1. All Items Have:
      1. Name - string
      2. Spanish Name - string
      3. Weight – float – how much weight it takes up in inventory
      4. Price – int – how much it costs to buy and sell
      5. Rarity – int – how likely it is to be randomly generated in the world
      6. 3D Model
      7. menuIcon – Sprite - Inventory Menu Icon
      8. IsCraftable – boolean (default to false)
      9. useSound – AudioClip - Sound when used
      10. pickupSound – AudioClip - Sound when picked up
      11. dropSound – AudioClip - Sound when dropped
   2. **Weapon Types (Sub-class)**
      1. All Weapon Types Have:
         1. Animation (swinging a sword, shooting a bow, etc.)
         2. Attack Damage
         3. Special Attributes (Some or all of…)
            1. Affects stats of enemy (function called in certain conditions)
            2. Affects stats of player (function called in certain conditions)
            3. Constant special effects on player's stats
      2. Sword
      3. Bow & Arrow
      4. Axe
   3. **Armor (Sub-class)**
      1. All Armor Types Have:
         1. Defense (HP)
         2. Special Attributes (Some, none, or all of…)
            1. Affects stats of enemy (function called in certain conditions)
            2. Affects stats of player (function called in certain conditions)
            3. Constant special effects on player's stats
      2. **Head (Sub-sub-class)**
         1. Helmet
         2. Hood
         3. Hat
         4. Etc.
      3. **Torso (Sub-sub-class)**
         1. Chain Mail
         2. Robe
      4. **Arms (Sub-sub-class)**
         1. Gauntlets
      5. **Hands (Sub-sub-class)**
         1. Gloves
      6. **Legs (Sub-sub-class)**
         1. Greaves
         2. Pants
      7. **Feet (Sub-sub-class)**
         1. Boots
         2. Sandals
      8. **Necklace (Sub-sub-class)**
         1. Beaded
         2. Silver
         3. Golden
      9. **Ring (Sub-sub-class)**
         1. Silver
         2. Gold
         3. Glass
   4. **Food (Sub-class)**
      1. Craftable
         1. Grilled Chicken
      2. Non-Craftable
         1. Raw Chicken
   5. **Potions (Sub-class)**
      1. Potential effects for any stat on player or enemy
   6. **Materials (Sub-class)**
      1. **Non-Craftable (Sub-sub-class)**
         1. Bone
         2. Glass
         3. Gold
         4. Hides
         5. Iron
         6. Silver
         7. Steel
         8. Wood
      2. **Craftable (Sub-sub-class)**
         1. Leather
         2. Nails

**Player Stats**

1. **HP**
   1. When this reaches zero, player is dead
2. **MP**
   1. Needed for casting spells
3. **Stamina**
   1. Needed to run and (maybe) attack
4. **Attack**
   1. How much HP enemies lose when player attacks them from physical hits
5. **Magic Attack**
   1. How much MP enemies lose when player attacks them with magic
6. **Defense**
   1. How much HP player does NOT lose when physically attacked by enemy
7. **Magic Defense**
   1. How much HP player does NOT lose when hit with enemy magic
8. **Accuracy**
   1. Affects arrow shot displacement
9. **Evasion**
   1. The higher this is, the less likely an enemy's attack will do damage
10. **Experience**
    1. How the player levels up
    2. Gain from killing enemies, drinking potions, or (maybe) using skills