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Now, let's proceed with the design and implementation plan for overhauling the `Player` class with NetHack-style attributes.

## Design Document: NetHack-Style Player Attributes

### 1. Overview

The goal is to integrate the six classic D&D/NetHack attributes (**Strength**, **Dexterity**, **Constitution**, **Intelligence**, **Wisdom**, **Charisma**) into the `Player` class. These attributes will become the player's core stats, which in turn will influence the existing "combat" stats (`warStrength` and `spiritualStrength`).

For clarity and to align with standard RPG terminology, we will make the following "renames" in our design:

- `warStrength` will be treated as **Health (HP)**.
- `spiritualStrength` will be treated as **Mana (MP) or Power**.
- `maxWarStrength` will be `baseMaxHealth`.
- `maxSpiritualStrength` will be `baseMaxMana`.

The new attributes will modify these values and other game mechanics.

### 2. New Attribute Definitions

1. **Strength (STR):**
  - **Purpose:** Governs physical power.
  - **Effect:**
    - Increases melee damage (from `WAR_WEAPON` items).
    - (Future) Increases carrying capacity.
2. **Dexterity (DEX):**
  - **Purpose:** Governs agility and ranged prowess.
  - **Effect:**
    - Increases ranged damage (from `BOW`, `CROSSBOW`).
    - Increases the player's "Armor Class" (passive damage reduction), supplementing armor.
3. **Constitution (CON):**
  - **Purpose:** Governs health and endurance.
  - **Effect:**
    - Directly increases **Max Health**.
    - Increases the amount of HP regained when resting.

4. **Intelligence (INT):**
  - **Purpose:** Governs magical and spiritual attack power.
  - **Effect:**
    - Increases magical/spiritual damage (from **SPIRITUAL\_WEAPON** items).
    - (Future) Could be used to identify items.
5. **Wisdom (WIS):**
  - **Purpose:** Governs spiritual energy and resilience.
  - **Effect:**
    - Directly increases **Max Mana**.
    - Increases the amount of MP regained when resting.
6. **Charisma (CHA):**
  - **Purpose:** Governs social interaction.
  - **Effect:**
    - (Future) Will be used to determine prices in shops.
    - (Future) May be used to pacify certain (e.g., **HUMANOID**) monsters.
    - For this implementation, it will be included but have no immediate effect.

### 3. Affected Classes

1. **gamedata/Difficulty.java:** This enum will be expanded to include starting values for all six new attributes.
2. **gamedata/Player.java:** This class will receive the most significant update. It will:
  - Rename `warStrength -> health` and `spiritualStrength -> mana`.
  - Add fields for the six new attributes (e.g., `private int strength;`).
  - Update the constructor to pull these new base stats from the **Difficulty** enum.
  - Implement `getEffectiveMaxHealth()` and `getEffectiveMaxMana()` to be calculated from `baseMaxHealth + (CON modifier)` and `baseMaxMana + (WIS modifier)`.
  - Implement modifier methods (e.g., `getStrengthModifier()`) that will be used by other systems.
  - Update the `levelUp()` method to grant an increase to one of the six random attributes instead of `wsIncrease/ssIncrease`.
  - Update the `rest()` method to use CON and WIS for health/mana restoration.
3. **managers/CombatManager.java:** The `playerAttack()` method will be updated to fetch attribute modifiers from the **Player** (e.g., `getStrengthModifier()`) and add them to the damage calculation.
4. **rendering/Hud.java:** The HUD will be updated to:
  - Rename "WS" and "SS" labels to "HP" and "MP".