

## 1. Player Rules

- Players must provide:
  - Full name (first and last name)
  - Email address
- Player accounts can exist without characters (newly created accounts)
- One player can have multiple characters (1:N relationship)

## 2. Character Rules

- **Naming:** Character first and last name combination must be unique within the game
- **Player Association:** Each character must be associated with exactly one player account
- **Required Properties:** Every character must have:
  - First name and last name
  - Race and clan
  - At least one job unlocked
  - A weapon always equipped in main hand slot
  - Statistics (all characters have the same set of statistics)
  - Inventory for items
  - Currency holdings
- **Weapon Requirement:** Characters must ALWAYS have something equipped in the main hand slot (given starting weapon at creation)

## 3. Race and Clan Rules

- **Fixed Races:** Limited set of supported races (Human, Elf, Halfling, Orc, and others)
- **Race-Clan Relationship:** Each race has exactly two possible clans:
  - Humans → Midlanders or Highlanders
  - Elves → Duskwight or Wildwood
  - (Other race-clan combinations follow similar pattern)
- **Clan Exclusivity:** Each clan is associated with only one race (e.g., only Elves can be Duskwights)
- **Race Addition:** New races can be added infrequently by developers

## 4. Job Rules

- **Job Levels:** Range from 1 to 100
- **Experience Points (XP):** Required to increase job levels
- **Job Unlocking:** Players must unlock individual jobs on each character
- **Unlocked Jobs** must have:
  - Job level (1-100)
  - Experience points
- **Locked Jobs:** Have neither level nor XP
- **Starting Job:** Every character must have at least one job unlocked (chosen at character creation, starts at level 1 with 0 XP)
- **Current Job:** Determined by the weapon currently equipped

- **Job List:** Approximately 20 available jobs, with new ones added every couple of years

## 5. Statistics Rules

- **Universal Statistics:** Every character has the same set of statistics (approximately 20 different types)
- **Individual Values:** Each character has different values for these statistics
- **Examples:** Strength, Dexterity, Vitality, Intelligence, Mind
- **Modification:** Statistics can be modified infrequently

## 6. Currency Rules

- **Active Currencies:** Approximately 40 different currencies at any time
- **Currency Changes:** 2-3 times per year (old discontinued, new introduced)
- **Currency Properties:**
  - Currency name (unique string)
  - Cap (optional): Maximum amount any character can own
  - Weekly cap (optional): Maximum amount any character can acquire per week
- **Weekly Reset:** Week resets on Tuesday morning for all characters simultaneously
- **Character Storage:**
  - Current amount possessed
  - Amount acquired since last weekly reset (for currencies with weekly caps)

## 7. Item Rules

### General Item Properties:

- Item name (NOT necessarily unique - "copper rings" example)
- Item level (positive integer indicating power)
- Maximum stack size (positive integer)
- Price in gold pieces (nullable - not all items can be sold)

### Item Categories:

#### 7.1 Gear Rules:

- **Slots:** head, body, hands, legs, feet, earring, necklace, wrist, ring (never main hand)
- **Job Restrictions:** One or more jobs can equip the item
- **Level Requirement:** Character must meet minimum level
- **Stat Bonuses:** 4-5 statistics with integer bonus values
- **Slot Changes:** Very infrequent (e.g., "waist" slot was removed)

#### 7.2 Weapon Rules:

- **Slot Restriction:** Can ONLY be equipped in main hand slot
- **Main Hand Exclusivity:** Only weapons can be equipped in main hand

- **Job Association:** Each weapon is usable by exactly ONE job
- **Job Determination:** Character's current job = weapon's job
- **Properties:** Required level, stat bonuses, damage value

### 7.3 Consumable Rules:

- **Description:** Plain-language text description
- **Bonuses:** 2-3 statistic bonuses
- **Bonus Type:** Percentage-based with cap (e.g., "8% up to 313")
- **Bonus Calculation:**
  - If percentage of current stat < cap: Apply percentage
  - If percentage of current stat > cap: Apply cap only

## 8. Inventory Rules

- **Slot System:** Inventory divided into numbered slots
- **Slot Capacity:** Each slot holds one stack of items
- **Stack Limits:** Cannot exceed item's maximum stack size
- **Stack Composition:** Each stack contains only one type of item
- **Multiple Stacks:** Same item type can exist in different slots
- **Slot Count:** Approximately 300 inventory slots per character
- **Empty Slots:** Allowed and tracked

## 9. Equipment Slot Rules

- **Available Slots:** main hand, head, body, hands, legs, feet, earring, necklace, wrist, ring
- **Slot Occupancy:** Maximum one item per slot
- **Optional Slots:** All slots except main hand can be empty
- **Slot Restrictions:** Items can only be equipped in their designated slot type
- **Main Hand Special Rule:** Must always have a weapon equipped

## 10. Data Integrity Rules

- **Prototype-Instance Model:** Item properties defined once (prototype), multiple characters can own instances
- **Normalization:** Item properties must not violate 2NF or 3NF
- **Relationship Tracking:** Must track which characters own which item instances and quantities

## Data Model Relationships Summary

1. **Players** → **Characters:** 1 to many (0..\*)
2. **Characters** → **Clans:** Many to 1
3. **Clans** → **Races:** Each clan belongs to exactly one race
4. **Characters** → **Jobs:** Many to many (through unlocked jobs)

5. **Characters** → **Items**: Many to many (through inventory)
6. **Characters** → **Equipped Items**: 1 to many (max 1 per slot)
7. **Characters** → **Currencies**: Many to many (through wealth tracking)
8. **Characters** → **Statistics**: All characters have all statistics
9. **Weapons** → **Jobs**: Each weapon belongs to one job
10. **Gear** → **Jobs**: Each gear item can be used by multiple jobs
11. **Items** → **Bonuses**: Items have multiple stat bonuses