**N8N Flows**

**1️⃣ INIT\_USER\_SETUP**

**Trigger:** New user signup (Users table)  
**Purpose:** Create character, assign skills, setup tutorial quest

**Steps:**

1. **Trigger** → New user created
2. **Create Character** → Characters table
3. **Assign Default Skills** → Skills table
4. **Initialize Tutorial Quest** → Projects / Tasks table
5. **Setup Default Settings** → Settings table
6. **Create Inventory / Starter Items** → Inventory table (optional)
7. **Generate Cloud Sync Token** → Users table update
8. **Log Onboarding Event** → Events table
9. **Trigger Follow-up Flows** → QUEST\_AUTOSTART, DASHBOARD\_RENDER

**Reusable Modules:**

* **Skill Assignment** → Used by INIT\_USER\_SETUP, QUEST\_ENGINE (for XP updates)
* **Event Logging** → Can be used by any flow (HABIT\_CHECKIN, DAMAGE\_CALC, QUEST\_ENGINE, etc.)

**2️⃣ HABIT\_CHECKIN**

**Trigger:** Manual habit marked done (Habits table)  
**Purpose:** Update XP, coins, and skill XP

**Steps:**

1. **Trigger** → Habit marked done
2. **Calculate Rewards** → XP, coins, streak multiplier
3. **Update Habit / Skill XP** → Habits + Skills table
4. **Log Event** → Events table

**Reusable Modules:**

* **Reward Calculation Module** → Can be reused in QUEST\_ENGINE, ACHIEVEMENT\_UNLOCK
* **Event Logging Module** → Already used in INIT\_USER\_SETUP

**3️⃣ DAMAGE\_CALC**

**Trigger:** Bad habit marked (HabitBattles / Events)  
**Purpose:** Reduce HP, log damage

**Steps:**

1. **Trigger** → Bad habit completed
2. **Calculate Damage** → HP deduction (possibly with skill modifiers)
3. **Update Character HP** → Users / Characters table
4. **Log Event** → Events table
5. **Trigger Visual Animation** → optional front-end call

**Reusable Modules:**

* **Event Logging** → Already shared
* **HP Adjustment Module** → Can be reused in CRON\_MANAGER, HOTEL\_RESTORE

**4️⃣ QUEST\_ENGINE**

**Trigger:** Task / Project completion (Tasks / Projects)  
**Purpose:** Grant XP, coins, streak bonuses

**Steps:**

1. **Trigger** → Task marked complete
2. **Calculate Rewards** → XP, coins, streak multiplier
3. **Update Skills** → Increment skill XP
4. **Update User Stats** → Users / Characters table
5. **Check for Achievement Thresholds** → call ACHIEVEMENT\_UNLOCK
6. **Log Event** → Events table

**Reusable Modules:**

* **Reward Calculation Module** → Shared with HABIT\_CHECKIN
* **Event Logging Module** → Shared
* **Skill Update Module** → Shared

**5️⃣ SHOP\_CHECK**

**Trigger:** Item purchase (Items / Transactions)  
**Purpose:** Deduct coins, add item to inventory

**Steps:**

1. **Trigger** → Purchase request
2. **Validate Coins** → Check Users / Characters table
3. **Deduct Coins** → Update Users / Characters
4. **Add Item to Inventory** → Inventory table
5. **Log Transaction Event** → Transactions / Events

**Reusable Modules:**

* **Transaction Logger** → Could feed into ACHIEVEMENT\_UNLOCK (wealth milestones)
* **HP / XP Modifier Module** → Only if items give buffs

**6️⃣ CRON\_MANAGER**

**Trigger:** Scheduled (daily/weekly)  
**Purpose:** Run HP penalties, bonuses, generate events

**Steps:**

1. **Trigger Cron** → Daily / Weekly schedule
2. **Apply HP / XP Updates** → Users / Characters table
3. **Generate Daily Events** → call EVENT\_SEEDER or RNG\_MIX
4. **Log Event** → Events table

**Reusable Modules:**

* **HP Adjustment Module** → shared with DAMAGE\_CALC
* **Event Seeder Module** → shared with EVENT\_SEEDER
* **Reward Calculation Module** → optional, if daily bonuses exist

**7️⃣ AI\_MISSIONS**

**Trigger:** Daily (AI\_Logs)  
**Purpose:** Generate missions via AI companion

**Steps:**

1. **Trigger** → Daily AI mission cycle
2. **Fetch User Stats / Skills** → Users, Skills, Events
3. **Generate Missions** → AI API call (GPT prompt)
4. **Insert New Tasks / Projects** → Tasks / Projects table
5. **Log Event** → AI\_Logs

**Reusable Modules:**

* **Event Logging Module** → Shared
* **Task Creation Module** → Reusable with QUEST\_ENGINE

**8️⃣ ACHIEVEMENT\_UNLOCK**

**Trigger:** XP / milestone threshold crossed (Users / Skills)  
**Purpose:** Grant title, badge, and bonus

**Steps:**

1. **Trigger** → XP threshold crossed
2. **Grant Achievement** → Achievements / Inventory table (badge/reward)
3. **Update User Stats** → XP/bonus if applicable
4. **Log Event** → Events table

**Reusable Modules:**

* **Event Logging Module** → Shared
* **Reward Calculation Module** → Shared

**9️⃣ EVENT\_SEEDER**

**Trigger:** Monthly (Events / RNG\_table)  
**Purpose:** Add new random events into the pool

**Steps:**

1. **Trigger Cron** → Monthly
2. **Generate Random Events** → RNG logic / RNG\_table
3. **Insert Events** → Events table
4. **Notify Users** → optional push / dashboard update
5. **Log Event** → Events table

**Reusable Modules:**

* **RNG Event Generator** → Shared with CRON\_MANAGER (daily events)
* **Event Logging Module** → Shared

**🔟 PRESTIGE\_CALC**

**Trigger:** Level max reached (Users / Characters)  
**Purpose:** Reset stats, add permanent bonus

**Steps:**

1. **Trigger** → Level threshold reached
2. **Calculate Prestige Bonus** → XP/HP/permanent perks
3. **Reset User Stats** → XP/HP/Skills to base
4. **Update Achievements / Titles** → optional
5. **Log Event** → Events table

**Reusable Modules:**

* **Reward Calculation Module** → Shared
* **Event Logging Module** → Shared
* **Skill Reset Module** → Could be shared with INIT\_USER\_SETUP for default skill setup

**💡 Reusable Modules Across Flows**

1. **Reward Calculation Module** → XP, coins, streaks
2. **Event Logging Module** → All XP, HP, item, mission updates
3. **HP / XP Modifier Module** → DAMAGE\_CALC, CRON\_MANAGER, PRESTIGE\_CALC
4. **Skill Update Module** → HABIT\_CHECKIN, QUEST\_ENGINE, PRESTIGE\_CALC
5. **Task / Project Creation Module** → INIT\_USER\_SETUP, AI\_MISSIONS, QUEST\_ENGINE
6. **Transaction Logger** → SHOP\_CHECK, inventory events