# Game Design Document: Scoundrel (Digital Edition)

**Project Name:** Scoundrel: Mobile
**Genre:** Minimalist Dungeon Crawler / Rogue-like Puzzle
**Platform:** Mobile (Portrait Mode)
**Art Style:** Classic Playing Cards on Dark Green Felt

## 1. Game Overview

*Scoundrel* is a tactical resource-management game played with a specialized 44-card standard deck. The player acts as an adventurer navigating a dungeon deck one "room" at a time. The goal is to reach the end of the deck with at least 1 HP remaining.

## 2. Deck Composition

The game uses a modified standard deck (44 cards total). All **Red Face Cards** (Jack, Queen, King) and **Red Aces** are removed to maintain difficulty balance.
- **Monsters (Spades & Clubs):** 26 Cards. Values: 2–10, J(11), Q(12), K(13), A(14).
- **Armor/Shields (Diamonds):** 9 Cards. Values: 2–10.
- **Potions (Hearts):** 9 Cards. Values: 2–10.

## 3. Core Mechanics

### 3.1 Static Shield (Diamonds)

Unlike traditional variants, shields in this version are permanent armor plates.
- **Equipping:** Tapping a Diamond card sets the Player's Shield value to that number.
- **Persistence:** The Shield value **never decreases** when blocking damage. It stays at its value until a new Diamond card is equipped.
- **Replacement:** Picking up a new Diamond replaces the current one entirely.
  - *Safe-Guard:* If a player taps a lower-value Diamond than their current shield, a "Confirm Downgrade" prompt appears.

### 3.2 Elemental Affinity (Combat)

Damage calculation is deterministic and depends on the suit of the monster.
- **Spades (Blades):** Blocked at **100%** efficiency.
  - *Formula:* Damage = Max(0, Monster Value - Shield Value)
- **Clubs (Bludgeons):** Blocked at **50%** efficiency (Heavy impact).
  - *Formula:* Damage = Max(0, Monster Value - Floor(Shield Value / 2))
- **The Aces (Bosses):** Both Ace of Spades and Ace of Clubs have a value of **14** and follow the affinity math above.

### 3.3 Healing (Hearts)

Healing is a persistent resource that the player can use at any time.
- **Max HP:** 20.
- **Effect:** Tapping a Heart card restores HP equal to the card's value.
- **No Consumption Limit:** Players can consume multiple Heart cards within a single room or across multiple turns without restriction.
- **HP Cap:** Total HP can never exceed 20. Any healing value that would push the total above 20 is lost (e.g., if a player has 18 HP and consumes a 5 of Hearts, their HP becomes 20).

### 3.4 The Coward's Toll (Run)

Players can flee a dangerous room, but at a physical and tactical cost.
- **Action:** Moves all remaining cards in the Room to the **bottom of the deck**.
- **Cost:** -1 HP instantly.
- **Restrictions:**
    1. Can only be used if **3 or 4 cards** are present in the Room.
    2. **No Back-to-Back:** After running, the "Run" button is disabled until the player fully clears or interacts with the next room.

## 4. UI/UX & Interaction

### 4.1 Visual Layout

- **Theme:** Classic "Card Table" look with a solid dark green background.
- **HUD (Top):** * **Left:** Red Heart Icon + 15 / 20 (Current/Max HP).
    - **Right:** Red Diamond Icon + 8 (Current Static Shield).
- **The Room (Center):** 2x2 grid of high-resolution classic playing cards.
- **Footer:** * **Left:** Closed deck stack with a numerical overlay of **Remaining Cards** (e.g., 32).
    - **Right:** A prominent "RUN (-1 HP)" button.

### 4.2 Feedback & Juice

- **Damage Preview:** Tapping and holding a Monster card shows a red "-X" floating near the HP bar to preview damage.
- **Suit Awareness:** When the user selects a Club, the Shield icon in the HUD flashes or turns translucent to signal the "50% Block" penalty.
- **Healing Feedback:** Hearts flash white or glow green upon consumption to indicate recovery.

## 5. Technical Game Loop

1. **Initialize:** Shuffle 44 cards. Set HP = 20, Shield = 0, RunAvailable = True.
2. **The Deal:** Pop 4 cards from DeckArray into RoomList.

3. **Player Input:** Wait for card tap or Run button.
4. **Process Logic:**
   - If **Monster**: Calculate Damage, subtract from HP.
   - If **Shield**: Set ShieldValue = NewValue.
   - If **Potion**: Add Value to HP (Clamp at 20).
   - If **Run**: Subtract 1 HP, append RoomList to end of DeckArray, set RunAvailable = False.
5. **Clean Up:** If RoomList is empty, check RunAvailable. If RunAvailable was False, set to True. Trigger **The Deal**.
6. **End Conditions: * Win:** Deck and Room are empty.
   - **Loss:** HP reaches 0.