# Game Design Document

“Ink & Heart”

Roguelite Deckbuilder where your life is a deck and every card is a tattoo

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# EXECUTIVE SUMMARY

## Elevator pitch

Climb a collapsing tower by tattooing living cards onto your skin.

Every wound tears pages from your heart-deck; death lets you splice your favorite cards into brand-new hybrids for the next run.

## Target audience

Fans of Slay the Spire, Luck be a Landlord, Vampire Survivors—looking for

a 10-minute snackable run with an endless “mad-scientist” crafting hook.

## Platform & scope

Windows / WebGL first, Godot 4, 3-6 month solo/duo project, 30 k LOC,

pixel-art, seeded RNG, English only.

## Unique selling proposition

Life = physical Heart cards (deck-clog healing).

Every card is also a permanent tattoo; slot or play—never both.

Dungeon path is your own discard pile turned into nodes.

Meta loop: fuse any two collected cards into player-created hybrids.

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# HIGH-LEVEL FLOW

Main Menu → Start Run → Generate Seed →

Floor 1-8 loop (see 5.1) → Victory/Death →

Collect 1 card to Binder → Fuse screen → Unlock feed → Back to Menu

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# CORE PILLARS

P1 “Tangible Life” – damage that literally thins your draw power.

P2 “Ink Dilemma” – short-term consistency vs. long-term passive power.

P3 “Footprint Map” – the way you play IS the route you take.

P4 “Player as Designer” – the best rewards are your own experiments.

# GAMEPLAY DEFINITIONS

## 4.1 Cards

3 fields: Name, Play Effect (cost 0-3), Ink Passive

Types: Attack (red), Skill (green), Power (purple), Block (blue)

Rarity: Common only in MVP; fusion creates “Hybrid” rarity

## 4.2 Heart Cards

20 identical cards “♥” with red back; no text

Damage: move ♥ from draw/discard to “Wound” pile (out of game)

Healing: move ♥ from Wound pile back into draw pile (shuffled)

## 4.3 Ink Slots

3 slots on player portrait; empty by default

Drag a card from hand → slot to Ink it (instant, 0 energy)

Passive upgrades +1 each time the draw pile is reshuffled (cap +5)

## 4.4 Energy

3 per turn, no carry-over, no extra-energy cards in MVP

## 4.5 Timeline (simplified)

No shared row; actions resolve player first, then enemy (classic order)

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# MODES & SYSTEMS

## 5.1 Run Loop (8 floors)

Generate random encounter deck (8 cards)

Lay out map = player’s predicted discard pile (see 5.3)

Pick next node → combat / shop / rest / mystery

Reward: choose 1 of 3 cards (no skip) OR relic OR 1 ♥ heal

Continue until boss (floor 8) → Victory or Death

## 5.2 Combat Rules

Draw 5, reshuffle when empty

Block vanishes at end of player turn

Enemy intents shown before player acts

Average combat length: 4-5 turns

## 5.3 Discard-Pile Map Generation

After each fight:

Sort discard by type

Attack → Elite node

Block → Rest site (heal 2 ♥ into draw)

Skill → Shop (relic or 1 of 3 cards, 10 gold cost)

Power → Mystery (random positive/negative event)

If a type is missing, fill with “Normal enemy” node.

Cap total nodes to 8; earliest cards placed leftmost.

## 5.4 Gold & Shops

Start with 0 gold; gain 10–20 per fight

Shop offers: 1 relic (30 g), 1 card (10 g), 1 ♥ heal (15 g)

No card removal in MVP

## 5.5 Relics

10 total, all passive

Examples

– Ink Pot: first card inked each combat costs 0 energy

– Bloody Quill: upgrade all ♥ cards in draw to give +1 block when drawn

# META SYSTEMS

## 6.1 Binder

Collection of cards saved between runs (max 20)

Add 1 card from final deck when run ends (win or lose)

## 6.2 Fusion Lab

UI: two side-by-side card slots + result preview

Algorithm (MVP simple)

Name = “A” + “B” (truncate to 12 chars)

Cost = floor((costA + costB)/2)

Play effect = concatenate text; numbers = average, rounded up

Ink passive = concatenate both passives; numbers = average

Rarity set to “Hybrid” and added to all future reward pools immediately.

## 6.3 Unlock Feed

Hybrid cards are the ONLY unlocks; no XP or permanent stats

After fusion, pop-up: “New hybrid available!”

Keeps scope tiny but visible progression

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# CONTENT LIST (MVP)

Player class: Inkblade (neutral name, no lore needed)

Cards 30

10 Attack (3 cost 1, 4 cost 2, 3 cost 3)

10 Block (same curve)

10 Utility (draw, gain ♥, enemy debuff, self buff)

Relics 10

Enemies 10 (7 normal, 3 elite)

Boss 1 “The Empty Page” – steals ♥ cards from draw pile

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# USER INTERFACE

## 8.1 Screens

Main Menu (Start / Binder / Fusion / Settings / Quit)

Map (horizontal row of 8 nodes)

Combat (single screen, hand fans bottom, enemy right, player left)

Reward (3 cards OR relic OR ♥ heal)

Fusion Lab (drag two cards, see result, Confirm)

Game Over (stats + choose 1 card for Binder)

## 8.2 Controls

Mouse: drag card to play or ink slot

Keyboard shortcuts: Space = end turn, R = view map, E = ink mode toggle

Controller: optional (left stick move cursor, A = confirm, B = cancel)

## 8.3 Visual Style

32×32 pixel art, 8-color palette (black, white, red, gold, three greys, purple accent)

UI panels use 9-patch borders, no gradients

VFX: punch shake 4 px, text pop 12 pt, single white flash frame

# AUDIO DIRECTION

Music: 1 combat loop (90 BPM), 1 menu loop, 1 fusion screen stinger

SFX: 6 total (draw, play card, ink, hit, block, death)

Generated with free retro-synth VST to stay legal & cheap

# TECHNICAL SPEC

Engine: Godot 4.2

Language: GDScript (≈ 30 k LOC)

Save: JSON file: seed, Binder array, unlockedHybridIDs, bestTime, bestScore

RNG: seeded Mersenne Twister; reproduce bugs by entering seed in debug menu

Platforms: Windows (exe + zip), WebGL (itch.io), Linux (export template)

Controller: XInput / SDL2 auto-map

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# BALANCE TARGETS

Win rate on first 20 runs: 5 %

After 10 hybrids unlocked: 30 %

Average run length: 25 combats, 12 minutes

Card pick distribution: 60 % attacks, 25 % block, 15 % utility

Ink usage: at least 1 tattoo in 80 % of runs by floor 3

# RISK MITIGATION

Seeded runs → bug reproduction trivial

No card removal / upgrades → eliminates tuning black-hole

Placeholder art acceptable until month 4; game must be fun with rectangles

Scope locks: no localization, no multiplayer, no achievements, no DLC hooks

# MILESTONES

Week 2 Proto: combat with 5 Strike/5 Defend, Heart cards, win/lose, back to menu

Week 4 Alpha: full 8-floor loop, 30 cards, 10 relics, fusion screen functional

Week 8 Beta: discard-pile map, juice, audio, balance pass, daily seed

Week 12 Gold: store page trailer, Steam build, bug-fix buffer

# APPENDICES

A. Card CSV template (Google Sheet export)

B. Relic spreadsheet with passives in pseudo-code

C. Enemy AI script examples (deterministic state machines)

D. Fusion string-concatenation rules & edge-case examples