

Stoned Rabbits: Idle Empire

Game Design Document / Whitepaper

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GAME DESIGN DOCUMENT / WHITEPAPER

"Stoned Rabbits: Idle Empire"

Genre: Idle / Incremental / Resource Management

Platform: Android (Google Play Store)

Engine: Unity (recommended)

1. HIGH-LEVEL OVERVIEW

1.1 Premise

In "Stoned Rabbits: Idle Empire", the player manages an ever-growing empire run by mischievous rabbits. These rabbits generate Magic Dust, the universal resource used for upgrades, buildings, and overall progression.

The player expands the rabbit settlement, unlocks new buildings, collects and upgrades rabbit workers, and uses a set of mini-games to accelerate progress. The game is lighthearted, humorous, and fast-paced, while still providing the long-tail engagement expected from idle titles.

1.2 Vision

The vision is to combine the highly engaging mechanics of idle/incremental games with a humorous rabbit-themed world that can later be connected to existing ecosystems (e.g., NFT collections) purely at a cosmetic or meta level. The initial Google Play Store version is fully off-chain and compliant with store policies.

2. CORE GAMEPLAY LOOP

2.1 Primary Loop

1. Rabbits generate Magic Dust passively over time.
2. The player collects Magic Dust manually or via auto-collect features.
3. The player spends Magic Dust to upgrade buildings and unlock new structures.
4. Upgraded buildings increase the production of Magic Dust.
5. The loop repeats with ever-increasing production and costs.

2.2 Secondary Loops

- Collect and upgrade Rabbits (workers).

- Play mini-games for temporary boosts and rewards.
- Complete quests and daily missions.
- Use the Prestige system ("Ascend the Burrow") to reset and gain permanent multipliers.
- Engage in seasonal events and time-limited content.

2.3 Meta Loop

Long-term engagement is driven by:

- The Prestige economy and Burrow Tokens.
- Seasonal rabbit skins and cosmetic content.
- Limited-time building themes and events.
- Weekly and seasonal competitive leaderboards (optional in MVP).

3. GAME ECONOMY

3.1 Primary Currencies

Magic Dust:

- Main soft currency.
- Generated passively by buildings and rabbits.
- Used for building upgrades, unlocking zones, and purchasing rabbits or crates.

Burrow Tokens:

- Prestige currency.
- Earned when the player "Ascends the Burrow".
- Provide permanent production multipliers.
- Spent in a talent tree or permanent upgrade system.

3.2 Secondary Currencies

Spin Tickets:

- Earned via daily missions, passive generation, or ad rewards.
- Used to play the "Spin the Wheel" mini-game.

Rumble Tickets:

- Used to enter Rumble Battles.
- Earned through play, missions, and possibly ads.

Gems (Premium Currency):

- Optional but recommended.
- Earned via IAPs and rare in-game rewards.
- Used for cosmetic skins, speeding up timers, and purchasing premium rabbits or special bundles.

3.3 Exchange Rates (Initial Balancing Suggestions)

- Building upgrade costs start in the low hundreds of Magic Dust and scale exponentially.
- Prestige thresholds (for Burrow Tokens) are based on total lifetime Magic Dust generated.
- One rewarded ad typically grants the equivalent of 15–30 minutes of production.

4. BUILDINGS AND PRODUCTION SYSTEM

4.1 Buildings Overview

Each building:

- Produces Magic Dust.
- Has a base output per time unit.
- Gains a multiplier with each level.
- May have unlock requirements tied to progression or other buildings.

Example Buildings (initial set, expandable):

1. Rabbit Farm:

- Basic early-game Dust production.
- First building the player sees and upgrades.

2. Energy Extractor:

- Medium production building.
- Introduces higher multipliers and faster growth.

3. Dust Compressor:

- Scales strongly with prestige.
- Becomes powerful in mid/late game.

4. Lucky Wheel Station:

- Generates Spin Tickets over time.
- Tied to the Spin the Wheel mini-game.

5. Rumble Arena:

- Unlocks Rumble Battles mini-game.
- Generates Rumble Tickets or boosts.

6. Loot Vault:

- Stores offline rewards and time-limited buffs.
- May improve the value of offline progression.

4.2 Production Formula

Base formula for Magic Dust production:

$\text{Production} = \text{BaseRate} \times \text{BuildingLevel} \times \text{RabbitMultiplier} \times \text{GlobalMultiplier}$

- BaseRate: the building's base production.
- BuildingLevel: current level of the building.
- RabbitMultiplier: derived from rabbits assigned to that building.
- GlobalMultiplier: from prestige upgrades, talents, temporary boosts, etc.

4.3 RabbitMultiplier

RabbitMultiplier is determined by the rabbits assigned to a building. Each rabbit contributes its rarity-based multiplier and possibly talent-based bonuses.

Recommended rarity tiers and starting multipliers:

- Common: $\times 1.00$
- Rare: $\times 1.10$
- Epic: $\times 1.25$
- Legendary: $\times 1.50$
- Mythic: $\times 2.00$

Players can assign specific rabbits to buildings to optimize production, adding a light layer of strategy.

5. RABBITS (WORKERS)

5.1 Rabbit Attributes

Each rabbit has:

- Rarity (Common, Rare, Epic, Legendary, Mythic).
- Production multiplier.

- Talent tags (e.g., Mining, Engineering, Luck, Battle, Expedition).
- Unlock level or conditions.

5.2 Rabbit Collection System

- The player starts with one Common rabbit.
- At regular intervals (e.g., every 5–10 minutes), a new rabbit crate can be earned or claimed.
- Crates have different tiers, impacting the chance to obtain higher rarity rabbits.
- Duplicates are converted into Rabbit Shards, used for evolution.

5.3 Rabbit Evolution

- Rabbits can be evolved by spending Rabbit Shards.
- For example: 10 shards of the same rabbit might evolve it to the next tier.
- Evolution increases the rabbit's production multiplier and may unlock special talents or visual changes.

6. MINI-GAMES

Mini-games are key for retention and monetization, offering meaningful rewards without being mandatory.

6.1 Spin the Wheel

- Free play every few hours (e.g., every 4 hours).
- Additional spins available using Spin Tickets or via rewarded ads.
- Rewards can include:
 - Temporary production multipliers (e.g., 2x for 10 minutes, 5x for 3 minutes).
 - Free rabbit crates.
 - Gems.
 - Large chunks of Magic Dust or offline rewards.
 - Rare "Lucky Jackpot" outcomes.

6.2 Rumble Battles

- A light auto-battle mini-game.
- The player selects up to 3 rabbits to enter a battle against AI-controlled rabbits.
- Rabbits have simple stats (attack, defense, health).
- Battles play out automatically; outcome is determined by stats and randomness.

- Winning rewards:
- Temporary production boosts.
- Rumble points or ranking.
- Shards for battle-focused rabbits.

Losing has no major penalty to avoid frustration.

6.3 Coin Flip Boost

- A simple 50/50 gamble mechanic.
- If the player wins, they receive a temporary global production boost (e.g., 2x for 10 minutes).
- If the player loses, there is no reward but a cooldown applies.
- Optional integration with ads (e.g., extra flips via rewarded ads).

6.4 Expedition Missions

- The player sends selected rabbits on expeditions lasting from 1 to 12 hours.
- Upon return, rabbits bring back:
 - Magic Dust.
 - Gems.
 - Rabbit shards.
 - Spin or Rumble Tickets.
 - Unique cosmetic items.

Expeditions are ideal for offline play and long sessions.

7. PRESTIGE SYSTEM ("ASCEND THE BURROW")

7.1 Trigger and Conditions

- Prestige is unlocked once the player reaches a defined threshold of total Magic Dust generated or reaches a certain building level milestone.
- Example trigger: reaching 1e10 total Magic Dust.

7.2 Reset Rules

When the player Ascends the Burrow:

- Reset to zero:
 - Building levels.
 - Magic Dust.

- Most temporary boosts.
- Retained:
- Burrow Tokens (newly earned from the prestige event).
- Cosmetic skins.
- Gems and premium purchases.
- Achievements and certain meta-progression elements.

7.3 Rewards: Burrow Tokens

- Burrow Tokens are the primary prestige reward.
- A simple initial formula:

$$\text{BurrowTokens} = \text{floor}(\log_{10}(\text{TotalDustGenerated}))$$

- Burrow Tokens are spent in a talent tree to unlock permanent bonuses such as:
- Global production multipliers.
- Faster rabbit generation.
- Extra slots for expeditions.
- Improved chances for higher rarity rabbits.
- Discounts on building upgrades.

This loop encourages players to reset regularly to progress faster.

8. USER INTERFACE (UI) AND NAVIGATION

8.1 Main Screens

1. Home / Farm Screen:

- Central game screen.
- Shows buildings, rabbits (optionally), and current Magic Dust production.
- Quick access to collect buttons and key information.

2. Rabbits Screen:

- Overview of all collected rabbits.
- Details for each rabbit: rarity, multipliers, talents, shards.
- Assignment of rabbits to buildings.

3. Upgrades Screen:

- Detailed building upgrade options.
- Future unlocks and milestones.

4. Mini-Games Hub:

- Central access to Spin the Wheel, Rumble Battles, Coin Flip Boost, and Expeditions.

5. Prestige Screen:

- Explanation of the Ascend the Burrow system.
- Shows current potential Burrow Token gain.
- Shows unlocked talent tree and available upgrades.

6. Shop (IAP):

- Purchase of gem packs, premium rabbits, and bundles.
- Clear, compliant presentation following Play Store guidelines.

7. Settings:

- Audio settings, language options, credits, privacy policy, and terms.

8.2 Navigation Structure

- A bottom navigation bar with icons for:
 - Home.
 - Rabbits.
 - Mini-Games.
 - Prestige.
 - Shop.
- Contextual buttons on the top or side for:
 - Missions.
 - Events.
 - Notifications.

9. ART STYLE AND TONE

9.1 Visual Style

- 2D soft, colorful art with a slight cartoon feel.
- Rabbits depicted as cute, mischievous characters.
- Buildings have clear silhouettes and upgrade stages.

- UI uses rounded cards and clean typography.

9.2 Tone and Humor

- Lighthearted, chaotic, slightly "stoned" humor without explicit drug references.
- Example flavor text: "Your rabbits are working very hard... or at least they think they are."
- Family-friendly, playful vibe; focuses on fun, not controversy.

10. SOUND AND MUSIC

10.1 Music

- Calm, looping background tracks suitable for long sessions.
- Optional seasonal music themes for special events (e.g., winter, Halloween).

10.2 Sound Effects

- Collecting Magic Dust: soft pops or chimes.
- Building upgrades: satisfying upgrade "whoosh".
- Spin the Wheel: ticking sounds and a win chime.
- Rumble Battles: light battle SFX (no gore, cartoon-style).
- UI interactions: subtle clicks and confirmations.

11. TECHNICAL SPECIFICATIONS

11.1 Engine and Framework

- Unity is the recommended engine for:
- Integration with Google Play Services.
- Integration with ads and in-app purchases.
- Efficient deployment and updates.

11.2 Key Systems

- Offline production calculation:
- When the player returns, calculate elapsed time and grant Magic Dust accordingly.
- Background production:
- Ensure production continues when the app is idle or minimized (within platform limits).

- Save system:
- Encrypted local saves.
- Optional cloud save via Google Play Games Services.
- Modular building controller:
- Each building type uses a shared base class with specific parameters.
- Rabbit data system:
- Likely implemented with Scriptable Objects for easy data handling in Unity.
- Mini-game sub-systems:
- Clear separation of logic for Spin the Wheel, Rumble Battles, Coin Flip, and Expeditions.

11.3 Performance Targets

- Runs smoothly on mid-range Android devices.
- Minimal load times and efficient asset management.
- Low battery usage when idling.

12. MONETIZATION MODEL

12.1 Ads

Rewarded Video Ads:

- Primary monetization channel.
- Used for:
- Temporary production boosts.
- Extra Spins or Rumble entries.
- Free rabbit crates or premium currency.

Interstitial Ads:

- Optional.
- Can be shown at non-intrusive, natural breaks (e.g., after certain actions or when returning from mini-games).
- Frequency must be tuned to avoid frustrating players.

12.2 In-App Purchases (IAP)

Examples of IAP offerings:

- €0.99 – Starter Pack (gems + basic rabbit crate).

- €3.99 – Rare Rabbit Pack.
- €9.99 – Epic Rabbit Bundle (rabbits, crates, boosts).
- €19.99 – Legendary Builder Bundle (high multiplier rabbits, gems, temporary loss of ads).
- €5.99 – Seasonal "Rabbit Pass" with exclusive rewards.

12.3 Cosmetic Packs

- Cosmetic skins for:
 - Rabbits.
 - Buildings.
 - UI themes (color palettes, icons).
- Cosmetics have no direct gameplay advantage (optional); can be purely visual for Play Store safety and customer trust.

13. PROGRESSION AND BALANCING

13.1 Building Levels

- Early Game: Levels 1–100.
- Mid Game: Levels 100–500.
- Late Game: Levels 500–2000+.

13.2 Cost Growth Formula

A standard exponential cost curve can be used:

$$\text{Cost}(n) = \text{BaseCost} \times (1.07^n)$$

Where:

- BaseCost is the initial cost for level 1.
- 1.07 is a suggested growth factor (tweakable).

13.3 Production Growth Formula

Similarly, production can scale exponentially:

$$\text{Production}(n) = \text{BaseProduction} \times (1.15^n)$$

This ensures production scales slightly faster than cost to keep the player feeling powerful while still needing to invest and prestige.

13.4 Prestige Curve

Suggested initial formula for Burrow Tokens:

$$\text{BurrowTokens} = \text{floor}(\log_{10}(\text{TotalDustGenerated}))$$

This creates a nice logarithmic growth where each order of magnitude in production gives additional tokens.

14. LIVE OPS AND EVENTS

14.1 Seasonal Events

Examples:

- Easter Rabbits: colorful, egg-themed skins and rabbits.
- Summer Party Rabbits: beach and vacation-themed content.
- Halloween Rabbits: spooky skins, dark building themes.
- Winter Rabbits: snow, ice, and festive decorations.

Event Features:

- Event-specific missions.
- Limited-time cosmetics.
- Temporary global boosts (e.g., +10% production during event).
- Optional event leaderboard.

14.2 Limited-Time Offers

- Time-limited IAP bundles tied to events.
- Bundles with a mix of gems, rabbits, and cosmetic content.

15. ANALYTICS AND KPIs

Key metrics to track:

- Retention:
 - Day 1 (D1), Day 7 (D7), Day 30 (D30).
- Engagement:
 - Average session length.
 - Sessions per day per user.
- Monetization:
 - Conversion rate (percentage of paying users).

- ARPDAU (Average Revenue Per Daily Active User).
- LTV (Lifetime Value).
- Ads:
 - Ads watched per user per day.
 - Rewarded ad engagement rate.
- Gameplay:
 - Prestige frequency.
 - Usage of each mini-game.
 - Popularity of different rabbits and buildings.

Analytics will inform future balancing changes and content updates.

16. DEVELOPMENT ROADMAP (6–8 WEEKS)

Week 1:

- Implement core production system (Magic Dust).
- Create basic buildings and upgrade logic.
- Implement basic Home/Farm UI.

Week 2:

- Implement rabbit data system and assignment mechanics.
- Add rabbit collection and simple crate system.
- Integrate early progression logic.

Week 3:

- Implement Spin the Wheel mini-game.
- Implement Coin Flip Boost mini-game.
- Connect rewards to production multipliers and resources.

Week 4:

- Implement Rumble Battles mini-game (basic auto-battle).
- Implement Expeditions.
- Connect mini-game rewards to core economy.

Week 5:

- Implement Prestige system (Ascend the Burrow).

- Create Burrow Token and talent tree system.
- Integrate shop skeleton (IAP) and stub ads integration.

Week 6:

- Full integration with Unity Ads and IAP.
- Polish UI, tutorial, and user feedback.
- Conduct internal balance pass.

Week 7:

- Integrate analytics.
- Optional cloud save via Google Play Games Services.
- Closed beta testing and bug fixing.

Week 8:

- Final polishing and bug fixing.
- Create Play Store listing (description, screenshots, icon).
- Prepare and publish initial release.

CONCLUSION

"Stoned Rabbits: Idle Empire" is designed as a scalable idle/incremental game with strong monetization potential, high replayability, and a unique rabbit-themed identity. The game is built around proven idle mechanics, enriched with engaging mini-games, a robust prestige system, and future-ready hooks for events and cosmetic expansions.

This document can serve as both an internal GDD for development and an external-facing whitepaper to present the game's concept, structure, and roadmap to partners, artists, or investors.