Couch Clash Document

Overview

Title: Couch Clash

Engine: Unity

Time to design and develop: 2 weeks

Genre: Local 1v1 Fighting / Party Game

Controls: Gamepad: LT, RT → 2D Attack, X+ Joystick Direction → 3D Distraction

Platform: PC (Keyboard / Gamepad)

Mode: 2D + 3D

Target Audience: Casual players, party gamers, nostalgic 2000s kids

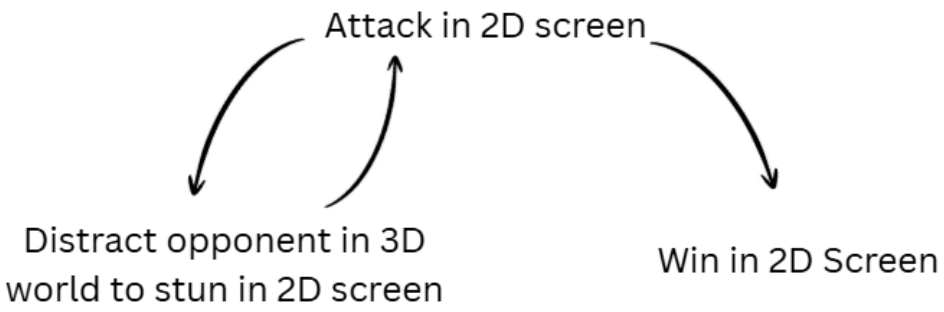
One line description: Punch your friends on-screen, defeat them off-screen; all without leaving the couch.

Core idea: *Couch Clash* reimagines the classic living-room rivalry.
It's a split-reality fighting game where two players battle inside a 2D pixel arena; just like playing another Mortal Kombat or Tekken; while their real-world avatars sitting on a couch can physically interfere through 3D interactions.
What happens on the screen isn't the whole fight because the chaos spills over into your living room.

Description: *Couch Clash* is a fast, goofy, and nostalgic local multiplayer fighting game that merges two worlds:
2D combat inspired by retro arcade brawlers and **3D couch chaos** representing real-life player mischief.

Players trade punches in the digital arena using classic moves, but can also distract or sabotage their opponent in the 3D scene by nudging, shaking, or bumping them to break focus and stun their 2D on screen characters.
The game captures the unfiltered fun of childhood playfights; noisy, messy, and full of laughter, turning your living room into both the battleground and the playground.

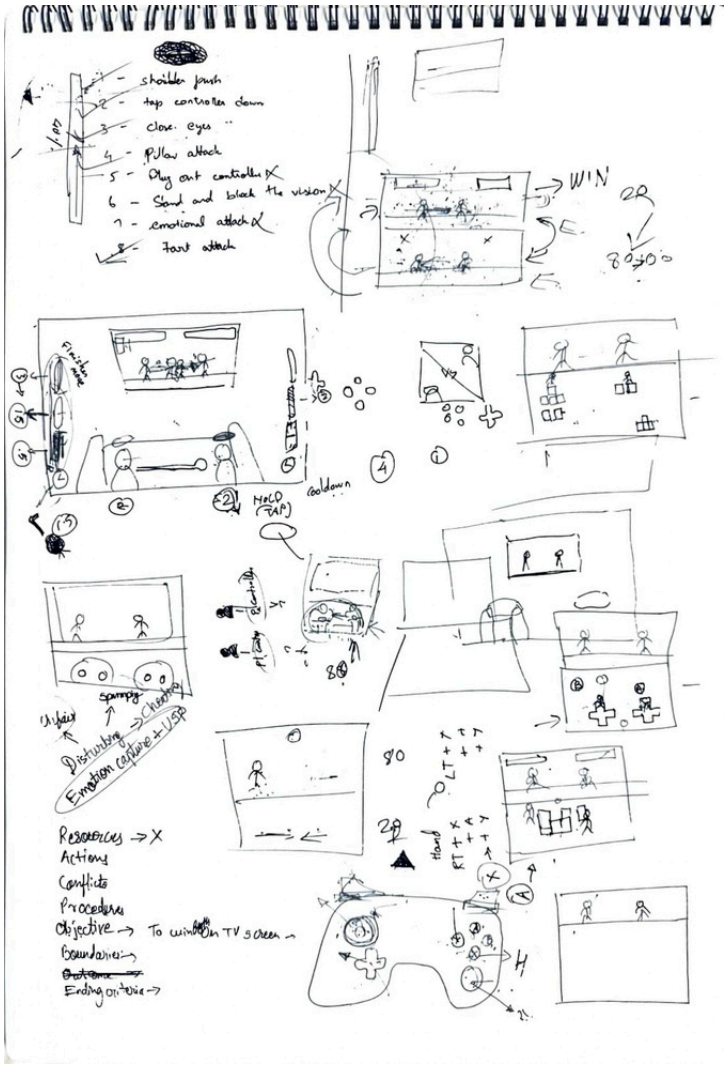
Core loop



The Process

Ideation

Design goal: To capture the fun of playful couch fights between two friends/ siblings as they play a 1 v 1 fighting game. Both in screen and off screen.



Unique Selling Point (USP): "Emotion Capture of the Couch." The core emotion isn't just about *winning or losing* — it's about **fairness, rivalry, and playful revenge**.

When we broke the experience down to its emotional core, we realized:

The *real* fun happens when:

- **Player A** feels **Player B** is overpowering them in the 2D game — either because they're more skilled or just older.
- This creates a sense of **unfairness** — the classic sibling dynamic of *"You always win because you're older!"*
- So Player A tries to *even the odds* by resorting to **unfair physical tactics** — distracting Player B in the **3D real world**.
- Player B, feeling wronged, retaliates — and the cycle of playful revenge begins.

Core of the Game:

3D actions influence 2D gameplay, and the *fun* emerges from this ongoing loop of unfairness and payback.

We distilled the core behaviors that define these moments of fun and frustration:

Player Behavior	Underlying Emotion
Distracting / disturbing the opponent	Retaliation, laughter
Spamming one key or combo	Desperation, persistence
Cheating physically or in-game	Playful unfairness

The essence wasn't "winning."
It was the *emotional tug-of-war* — feeling cheated, getting even, and laughing through it.

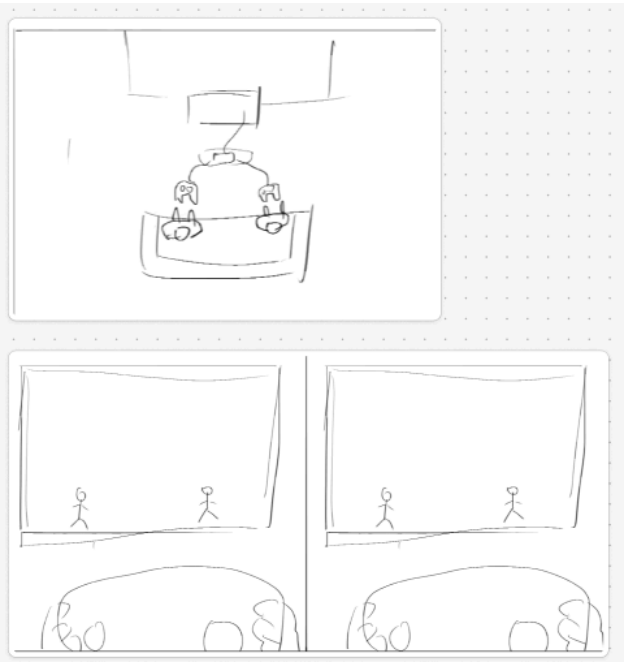
In game view:

How do we represent both **the 2D in-game world** and **the 3D real-world interactions** clearly and intuitively on one screen?

Key questions we asked:

- Should the game use **split-screen** or a **single shared view**?

- Should it be set on a **TV** or **laptop** — something players can physically interact with?
- How do we prevent confusion between “in-game actions” and “real-world mischief”?



Ideation Phase:

Duration: ~3–4 hours
Team: 3 designers
Outcome: 12+ iterations exploring different ways to merge 2D and 3D worlds.

We began by reimagining how the players themselves could exist inside or outside the game.

🧩 **<u>Iteration 1</u> – Miniature World Concept (Inspired by *It Takes Two*)**

- The players are **tiny (5–10 cm tall)** characters standing on a **physical keyboard**.
- Stepping on **WASD** and **Arrow Keys** moves their on-screen 2D fighters.

- A **single shared attack button** spawns randomly — both players race to reach it first.
- Players can **step on each other's keys**, blocking or disrupting inputs.
- 🎯 **Goal:**
  Make the *real-world struggle* directly manipulate the digital world.

🧩 **<u>Iteration 2</u> – Arcade Cabinet Concept**

- The players stand in front of a **retro arcade machine**.
- Each has a **D-Pad** to control movement.
- **Attack buttons** pop up randomly across the arcade surface.
- Players rush across the machine to hit them before the other does.

🎯 **Outcome:**
This version emphasized **physical competition and reaction time**, but still felt separate from emotional interaction (less couch-like).

🧠 Cognitive Load Study:

To understand player focus, we asked:

- What part of the screen deserves *most attention*?
- How much can players manage between two worlds simultaneously?

We divided gameplay into two logical layers:

- **Primary Section (2D world):** The in-game fight where victory is determined.
- **Secondary Section (3D world):** The real-world players whose actions affect the 2D gameplay.

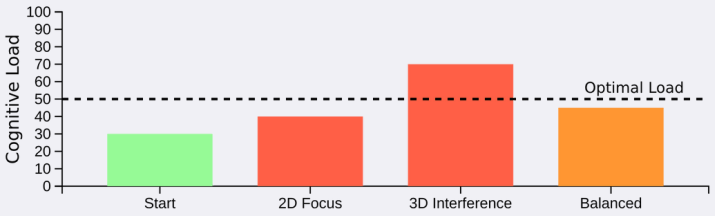
We quickly realized a potential problem:

If both players focused only on the 2D fight, the emotional chaos of the 3D interactions would vanish.
So our design needed to **balance attention** between the two — keeping both worlds constantly visible yet interconnected.

Design Challenge: Cognitive Load

The Challenge

- Simultaneously displaying 2D game and 3D physical chaos
- Preventing cognitive overload that distracts from gameplay
- Maintaining emotional engagement without overwhelming players



The Solution

- Strategic attention division between two game worlds
- 2D fight as Primary Section (objective outcome)
- 3D interactions as Secondary Section (emotional disruptions)

Key Insight

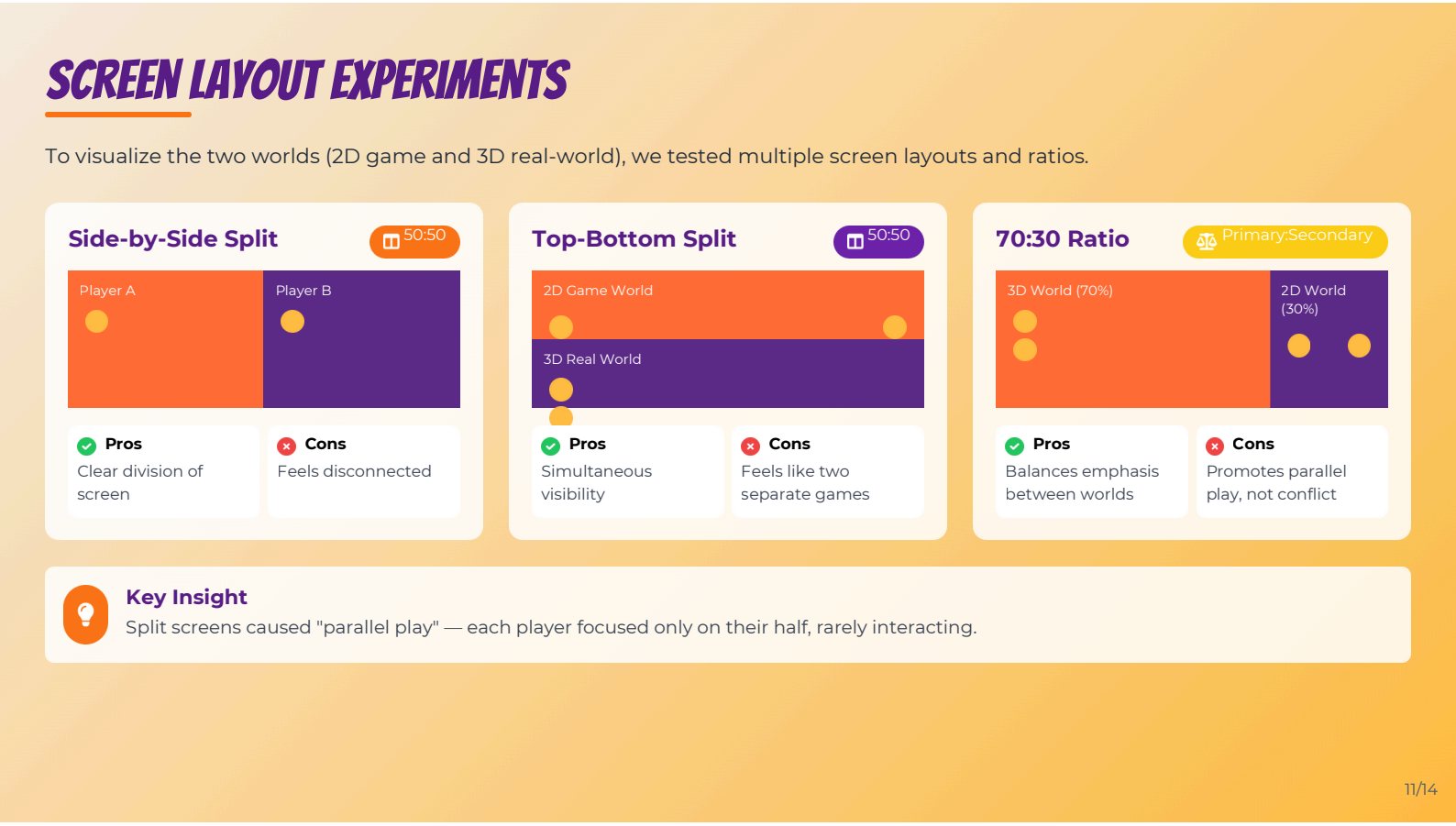
"Balancing focus between these two worlds was essential to ensure they mutually influenced each other, fostering the desired conflict and fun."

2D Gameplay 3D Interactions

Representation (Screen division):

To visualize the two worlds, we tested multiple screen layouts and ratios.

After many tests, we discovered a consistent issue:
Split screens caused **“parallel play”** — each player focused only on their half, rarely interacting.



🧩 Final Decision – Single Shared Screen:

We removed the split-screen entirely.

Why?

- A **shared screen** makes conflict *inevitable* — both players must focus on the same space.
- Promotes **healthy chaos** and **cross-interference.**
- Feels more like a *real couch fight*, where everything happens in one shared environment.

So, instead of two separate perspectives, we created **one unified frame** —
where 2D gameplay and 3D mischief overlap naturally, just like in real life.

Final Insight

“When both worlds share the same space, emotions become the real gameplay.”

The **fun** of *Couch Clash* lies in its emotional honesty:
Cheating, laughing, getting even — all feel real because the boundaries between screen and player no longer exist.

🎬 Final Screen Composition:

📸 Camera & Scene Setup

A single, unified **back-view shot** of two players sitting on a couch, playing a **90s-style 2D fighting game** displayed on the TV in front of them.

🧠 Cognitive & Communicative Rationale

- **Immediate narrative comprehension:**
  From a *visual-semiotics* standpoint, a single frame communicates both context and conflict — two humans, one screen, one rivalry. The viewer instinctively grasps the dual reality of "fighting in-game" while "fighting in real life."
- **Reduced cognitive saccade distance:**
  The 3D characters and the 2D game remain within the same focal cone, enabling *peripheral perception* to pick up real-world distractions without breaking focus from the on-screen action.
- **Cross-space attentional coupling:**
  Slight overlap of 2D and 3D layers maintains *spatial continuity* between virtual and physical realms, strengthening *embodied presence* and perceived causality.
- **Narrative economy:**
  No text or UI explanation is needed — the *mise-en-scène* itself tells the story.

Screen Experiments & Final Choice

Screen Layout Exploration

Layout Type	Ratio	Pros	Cons
Side-by-Side	50:50	Clear separation	No emotional overlap
Top-Bottom	70:30	Emphasizes 2D gameplay	Disconnect between layers
Single Screen	100	Shared focus, shared chaos	Harder to manage space

Key Findings:

- Split-screen configurations create artificial separation between players
- Single screen forces natural interaction and competition

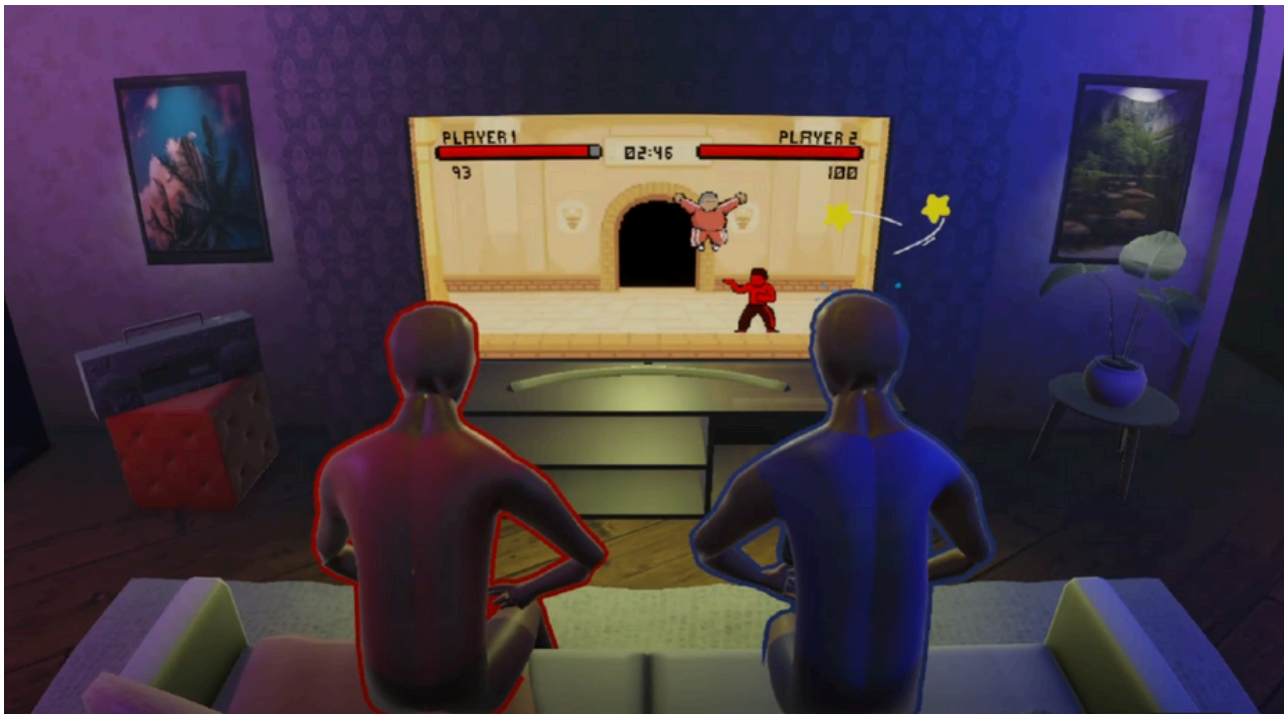
Final Choice: Single Shared Screen

Why Single Screen?

- Naturally forces interaction between players
- Promotes conflict and distraction
- Encourages genuine emotional responses

The Result:

"All split-screen configurations were removed in favor of a single shared screen. This choice was made because a single shared screen naturally forces interaction between players, thereby promoting conflict, distraction, and genuine emotional responses that are central to the game's design goal."



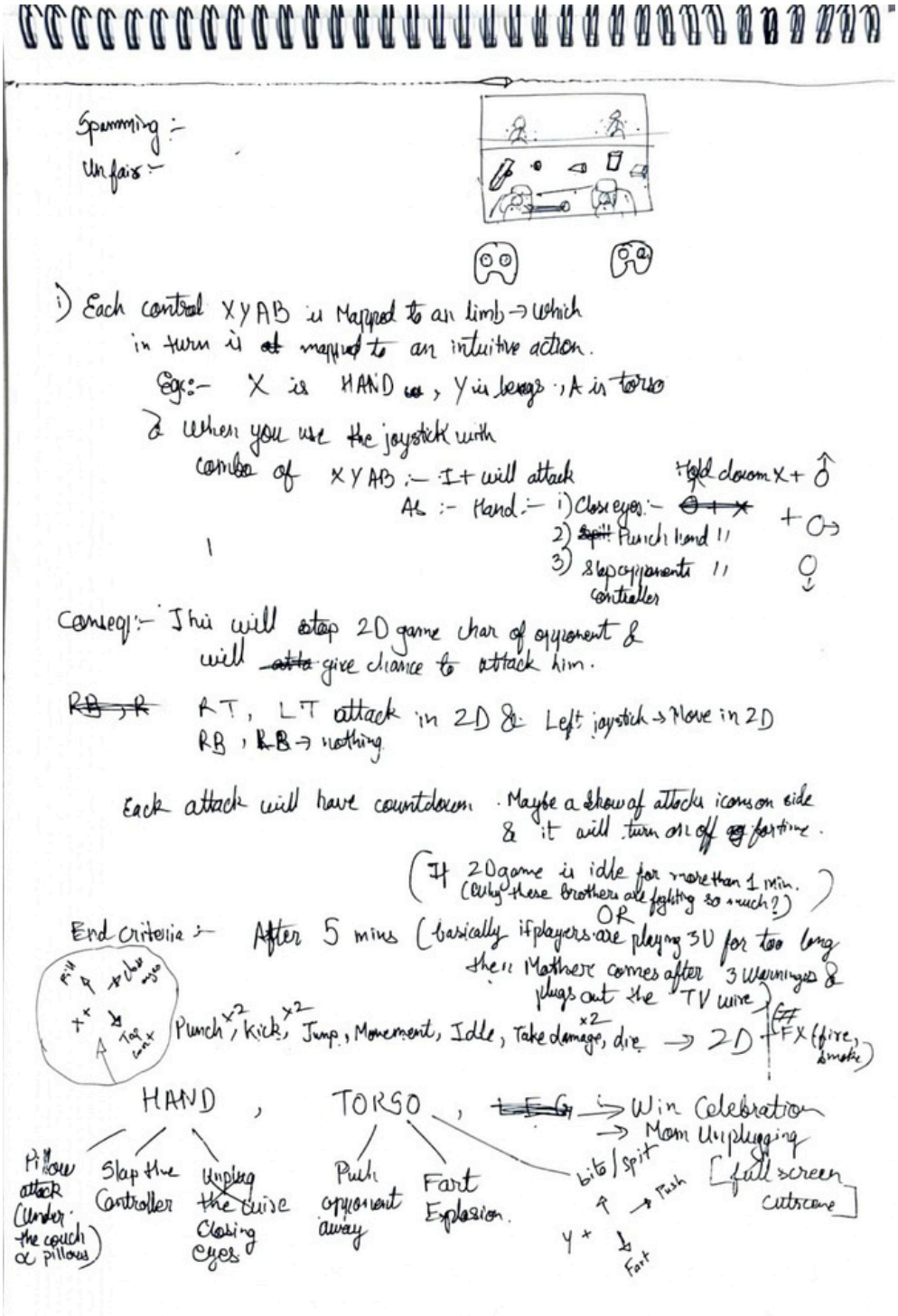
Finalized gameplay:

📹 Camera View

Overview

After multiple exploratory prototypes and more than a dozen conceptual iterations, the team converged on the final design vision for **Couch Clash** — a hybrid 2D-3D local fighting game that captures the *social, emotional, and physical energy* of childhood couch fights.

This document consolidates the finalized gameplay layout, player-input structure, and user-experience systems that emerged from those experiments.



The one page GDD made after finalization of first design

Game elements (Distractions):

We thought of various pranks, some of them are:

- unplugging the opponents controller from tv.
- Pushing them
- throwing a bucket of popcorn on their heads
- splashing glass of water from side table

- Mom coming in and unplugging the game.

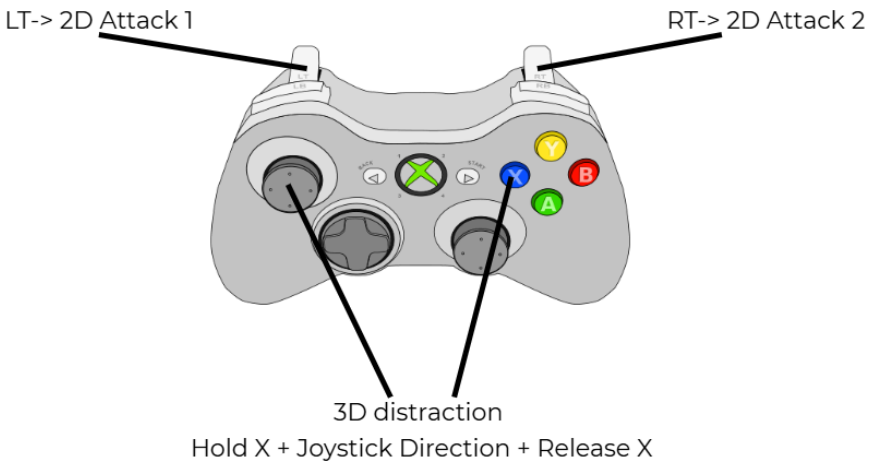
Gamepad Controls:

🎯 Design Goals

1. **Embodied interaction** — map actions to natural physical tendencies.
2. **Cognitive separation** — clearly distinguish the mental model of “in-game attack” vs “real-world distraction.”
3. **Ease of recall** — maintain *low extraneous cognitive load* for casual accessibility.

🕹️ Final Mapping Schema

Domain	Input	Cognitive Framing
2D Movement	Left Joystick	Mirrors real physical leaning; strengthens *motor resonance*
2D Attack	LT / RT (Triggers)	Outward-facing controls reinforce *domain separation* from distractions
3D Distraction Actions	Hold X + Joystick Direction → Release	Central thumb button encourages *flow-based muscle memory*



Initially, the 3D controls were isolated from the movement axis, but *embodied-interaction testing* revealed that players naturally lean in the direction of their character's motion.
By unifying inputs, the design leverages **kinaesthetic mirroring**, enhancing *sensorimotor immersion*.

HUD & Feedback System:

🧠 Design Problem

Pure freedom in using distractions led to **unbounded spam** and *attentional neglect* of the 2D layer.
We needed *regulated autonomy* — a system that preserves the *illusion of limitless freedom* while enforcing *temporal pacing*.

💡 System Solution — Time-Gated Cooldowns

Each distraction ability triggers a short **cooldown window**, enforcing *temporal rhythm* and *alternating engagement* between 2D and 3D tasks.

Early Approach

Vertical side-bars indicating cooldown.
Issue: High *eye-path distance* → poor *foveal monitoring*. Players ignored them.

Final Implementation

Cooldown feedback embedded directly into the **HUD radial menu** that appears when the distraction command is initiated.

- **State colors:**
  - *Red* = Inactive (cooling down)
  - *Green* = Ready
- **Temporal metaphor:** Circular clock-fill animation visualizes recharge duration.
- **Attention economy:** Center-screen display aligns with *foveal vision*, minimizing *visual search cost*.

⚙️ Interaction Flow

1. **Press & Hold X** → HUD radial menu appears.
2. **Move Joystick** → Highlight attack based on direction.
3. **Release X** → Execute chosen distraction; if neutral, cancel.
4. **Cooldown visualization** appears on that HUD element until re-ready.

This interaction sequence applies *GOMS model* logic — minimizing steps while maintaining deliberate engagement.

🧠 Cognitive-Load Engineering

Typical fighting games rely on *automatic proceduralization* (reflexive combos).
Couch Clash intentionally **inverts the input convention** — players hold first, then select direction.
This small inversion increases *intrinsic cognitive load* just enough to delay automation, producing a satisfying *learning curve*.
When players finally achieve fluency, the mastery feels "earned," reinforcing *competence motivation* per **Self-Determination Theory (SDT)**.

Final Input Grammar:
Hold X → Tilt → Release = Action
(Reversal of standard "Tilt + Press" sequence)

🪄 Distraction Taxonomy & Spatial Mapping

To align motor direction with conceptual origin, distractions were grouped by *body zone* — supporting *spatial mnemonic mapping*.

Joystick Direction	Anatomical Origin	Example Actions	2D Gameplay Response	Psychological Intention
Up	Head	Close eyes, spit	Brief blindness / stun	Humiliation humor
Left / Right	Torso	Shoulder push, slap controller	Drop / stagger	Territorial dominance
Down	Waist	Fart, throw pillow	Jump / recoil	Comic relief, embarrassment

This mapping leverages **image-schema theory** — using spatial orientation to encode meaning (Up = Precision, Down = Comedy, Side = Conflict).

Before

After

🖥️ HUD Visualization Concept

A **radial "Distraction Wheel"** centered near the player's focus zone:

- Three labeled nodes (Head / Torso / Waist).
- Icons: 😑 eyes closed | ✋ push | 🪶 pillow.
- Each node animates with a shrinking clock overlay during cooldown.
- Subtle haptic feedback confirms input commitment.

The design adheres to *minimal-intrusion UI* principles — maximizing *diegetic readability* while minimizing *cognitive switching cost*.

🔬 Psychological & Design Framework References

Principle	Application in Couch Clash
Embodied Cognition	Shared joystick mapping enhances bodily engagement.
Dual-Task Interference Theory	Alternating 2D / 3D focus creates dynamic attentional tension.
Flow Theory (Csíkszentmihályi)	Progressive mastery of inverted combo fosters micro-flow loops.
Self-Determination Theory	Cooldown pacing reinforces autonomy + competence + relatedness.
Affective Play	Distractions provoke laughter and social bonding — core of party play.

Key Insight

The joy of Couch Clash lies not in balanced competition, but in *performative mischief* — the push, the laugh, the retaliation.
By turning unfairness into a mechanic, the game transforms sibling chaos into deliberate design.

Visuals

Visual Design Goals (Operationalized)

- **Vibrant 2000s palette:** Saturated primaries + playful secondaries. High contrast + thin outlines on 3D characters for legibility over bright scenes.
- **Over-the-top hit FX:** Star bursts, smear frames, classic red blinking on stun and damage, KO slow-mo.
- **Whole gameplay "carried by animation":** The comedy and clarity come from animation first; VFX and UI serve it (not vice-versa).

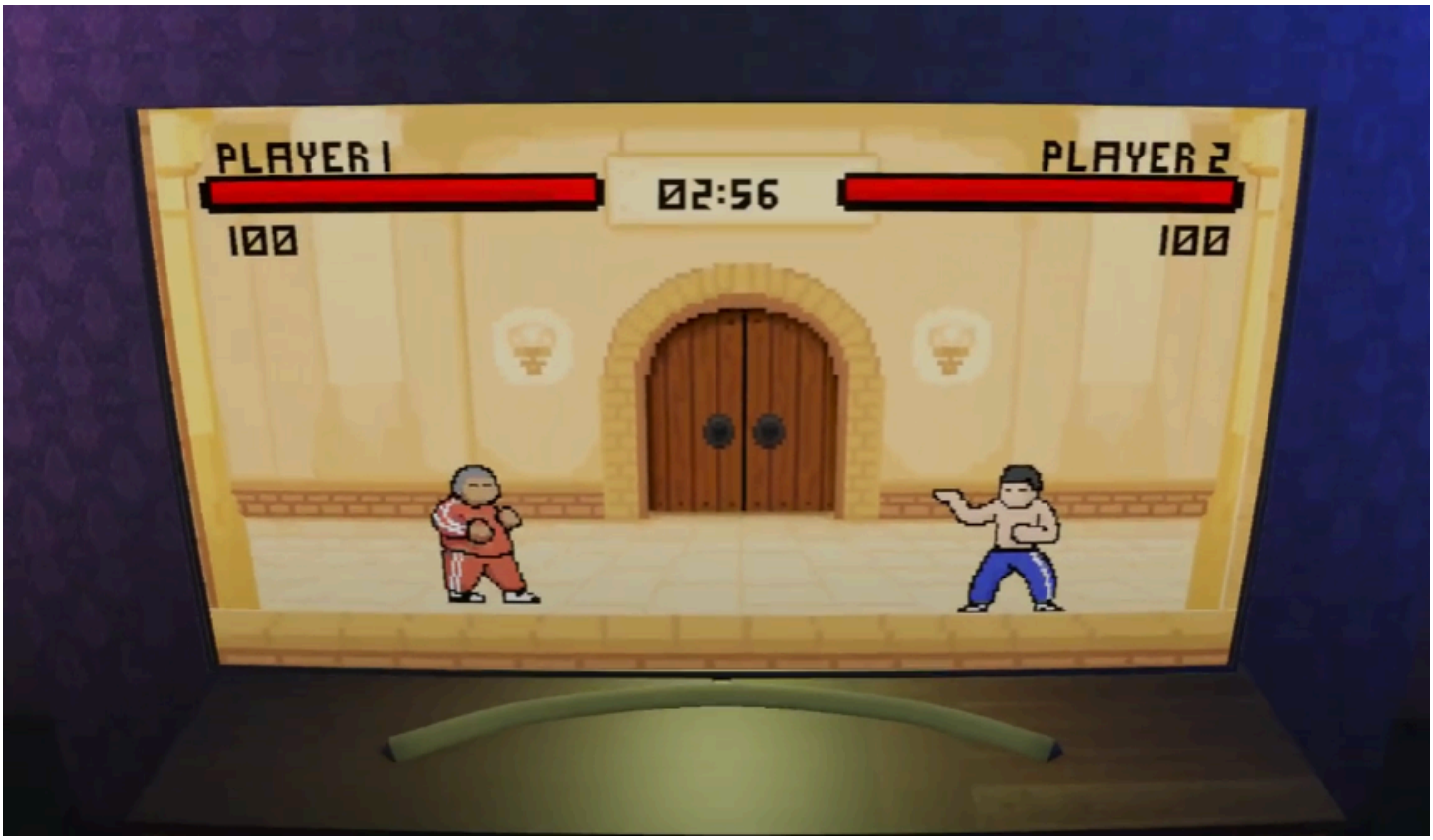
1) Visual Pillar: Retro-Modern:

Goal: Blend nostalgic arcade simplicity with modern, playful realism..

- **Style:** 2D pixel-inspired fighters + lighthearted 3D living-room environment.
- **Camera:** Zooms from static 2D arena to a cozy 3D scene, maintaining spatial continuity.
- **Why it works (Design Rationale):**
  - **Recognition over realism:** Retro minimalism lowers **cognitive load**, helping players instantly parse attacks.
  - The 3D space grounds the experience in familiar domestic context, reinforcing the core idea — *fights that spill off the screen*.

2) **Reference & Inspiration: Yie Ar Kung-Fu (Classic 90s fighter)**

- **What we borrowed:**
  - **Minimal, iconic frames** for attack readability. Older arcade titles excel at **state legibility**. We replicate that to keep players in **system 1 (fast) processing** for combat and save **system 2 (deliberate) processing** for 3D distractions.
- 3D World: **Simple Indian Home**
  - **Props:** TV + console, low table, **teapot**, **flowerpot**, **couch** (under-TV setup), and photo frames.



4) Lighting: **Arcade / Game-Parlour Vibes**

- **Look:** Neon accents, rim lights, soft colored practicals—**"fun disco party"** atmosphere.
- **Why it works? (Experience Design):**
  - Elevate energy, **raise arousal** (psychophysiological engagement) to match couch chaos.
  - Color-coded cues: warm tints near the couch (social warmth), cool/neutral near the TV for combat clarity.

5) Animation Strategy: **Exaggerated, Readable, Fun**

- All animations were created from **recorded real actions**—you acted them out, and animators rebuilt them in **Blender**, exaggerating for comedy.
  - This is effectively **light rotoscopy** (performance reference → stylized keyframes).
- Screen shake and VFX sync with key frames for *juiciness*.

Why it works: Exaggeration and clear silhouettes improve **event boundary recognition**, keeping humor readable and pacing intuitive.

7) UI/UX Complement (Brief)

- **Radial "Distraction Wheel"** pops on **Hold X** (center-screen for foveal vision).
- Cooldowns shown **in-place** (red state + circular clock fill).
- **Iconography:** Head / Torso / Waist = Up / Side / Down (spatial mnemonic).
- **Accessibility:** Outline fonts, 4.5:1 contrast minimum, color + shape dual coding for states.

Sound

We wanted it to be cartoony, layered and playful.

Layers

1. **BGM (Arcade Loop):**
    - Constant arcade loop; side-chained to lower under SFX.
2. **SFX (Attacks & Props):**
    - Cartoony push, laughter prank, pillow hit mulch, etc.
3. **UI SFX:**
    - Radial menu open/close selection tick.

Why this works

- Clear **auditory icons** = faster action parsing.
- **Cross-modal congruence** (animation ⇔ SFX) increases perceived impact (“more punchy than the sum of parts”).

THANK YOU