# Open Games Workshop
# SS 25
# Game Design Document

Gruppe:

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# Overview

## Core Idea

Blueprint X is a fast-paced 2D platform-fighter in which up to four local players attempt to knock each other off the battle arena with their attacks, trigger interactive stage elements, and clash in the cinematic mini-games. Victory is earned by depleting opponents' stocks rather than their hit-points, encouraging aggressive movement and creative use of the environment.

## Core Features

| | |
|---|---|
| **Directional Combat** | •Fast attacks in different directions (up, down, side) including light, heavy, and special moves |
| **Interactive Arena** | •Players can pick up and use items like bombs, and trigger stage hazards |
| **Last-Chance Minigame** | •After a critical hit, a quick-time event decides if the loser gets one last chance or is eliminated |
| **Local Multiplayer** | •Play with 1–4 players on the same screen |

## Genre & Target Audience

The game is a platform fighter where the goal is to knock opponents off the arena. This subgenre is less focused on skill and is more accessible, making it enjoyable for both casual and experienced gamers. Blueprint X combines classic knockback mechanics—where lower health means more pushback—with a traditional health bar system: if your health hits zero, you're eliminated. This hybrid approach draws inspiration not only from *Super Smash Bros.* and *Brawlhalla*, but also from traditional fighters like *Mortal Kombat* and *Street Fighter*. Blueprint X stands out through its use of
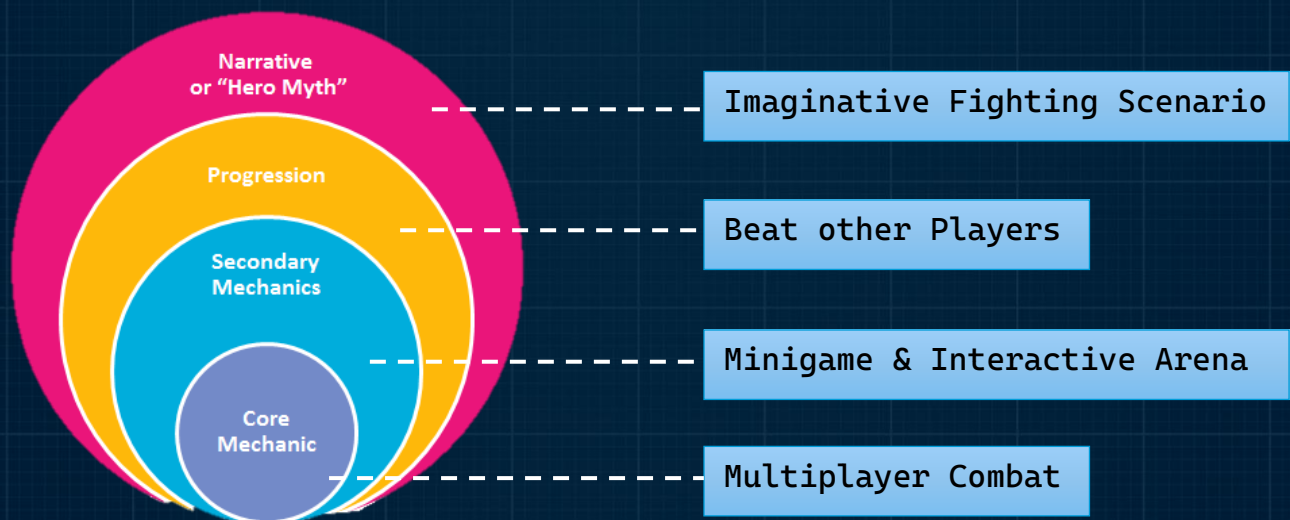
interactive arenas and cinematic dual mini games. Given that the game contains some level of violence, it is aimed at a target audience of individuals aged 13 and older, specifically teenagers and young adults.



Platform Fighter Examples

# Detailed Design

## Core Mechanics



Narrative or "Hero Myth" — — — Imaginative Fighting Scenario

Progression — — — Beat other Players

Secondary Mechanics — — — Minigame & Interactive Arena

Core Mechanic — — — Multiplayer Combat

# Game Rules

### Destroy Opponent(s)

Players deal damage using attacks, which both reduce health and apply knockback. The lower an opponent's health, the further they fly. The goal is to eliminate all other players.

### Stay in the Arena

If the player falls off the fighting stage or gets kicked out of visible bounds, they lose one life. If the player loses three lives, they lose.

# Game Mechanics

## Player Metrics

### Health Bar

Measures current player health. Lesser the value, longer the pushback distance. When the health bar reaches zero the player dies.

### Lives

Each player has three lives at the start of the match. If the player falls off the stage or gets eliminated, they lose one life. When the player has no lives left, they are out of the match.

# Player Actions

### Quick Attack
High-speed, low-damage attack in the chosen direction (left, right, up, down).

### Heavy Attack
Slow speed, high-damage attack in the chosen direction (left, right, up, down). Moves the player themselves. Used as both an attack and a movement action.

### Ultimate Attack
High-damage character-specific attack. Needs charging time / has a cooldown.

### Jump
Standard jump movement. Player can also perform double jump to reach higher platforms in the arena or to avoid falling from it.

### Dash
High-speed movement at a short distance in the chosen direction (left, right).

### Block
Defensive action to face the opponent's attack without reducing the guard meter. Must face the direction of the opponent's attack. Not available while airborne.

### Interact
Action for interacting with the arena. There are two main uses: 1) Platform triggers, 2) Item use

# Platform Triggers
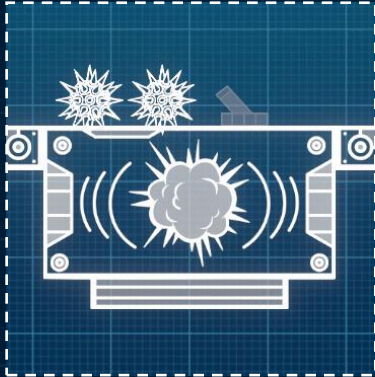
## Bomb Collector

Players can interact with a lever on the center of the lower platform to activate the bomb collector. The middle part of the platform flies down for a short period of time to collect a bomb, which can be used as an interactable item by all players.

## Laser

Players can interact with a lever on one of the upper platforms to activate a laser cannon for a short period of time. Laser does small damage to any player that passes through it. After deactivation, the laser is on cooldown for some time.
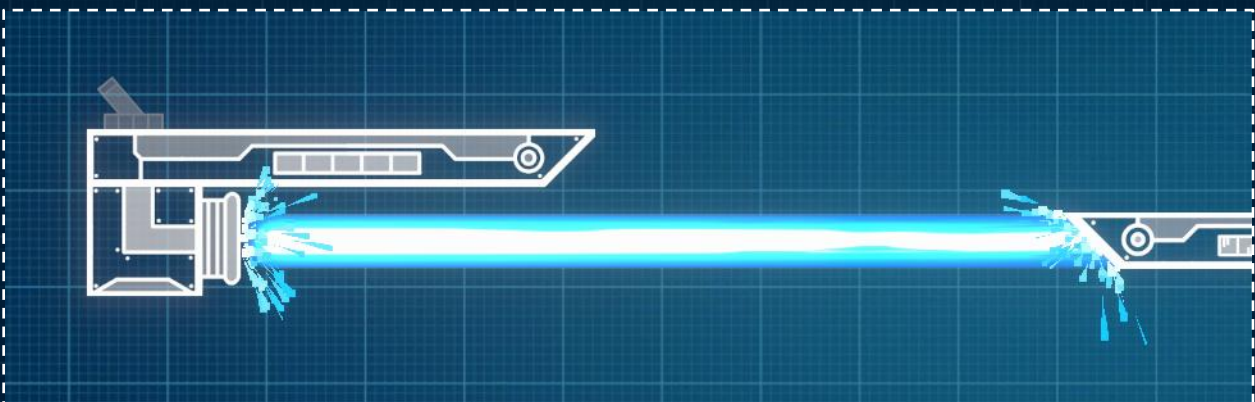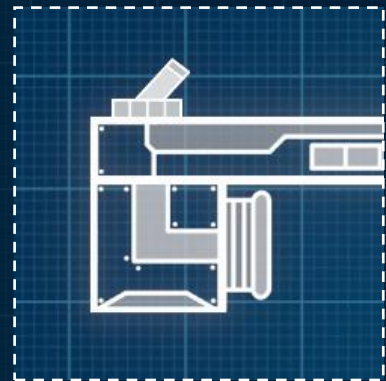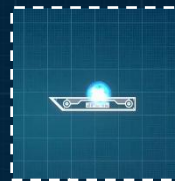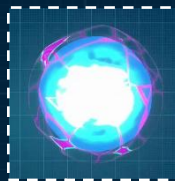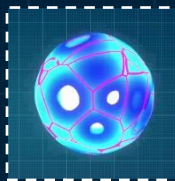
Activated Laser

## Interactable Items

### Bomb

Bomb items are brought into the arena by the Bomb Collector when activated. Players can interact with the bomb once in order to grab it, and a second time to throw it in a desired direction. The bomb is thrown to deal small damage to other players.
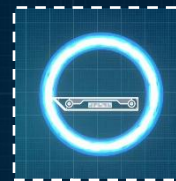
Exploding Bomb

## Minigame (Quick Time Event)

In special circumstances, two players may trigger a special quick-time event that requires them to play a minigame.

### Final clash

If a player has one life left, receiving a finishing blow (a heavy attack or an ultimate that would push the player off the stage), will trigger the minigame. If the player wins in the final clash, they become an extra life and can continue playing. If they lose, they also lose their last life and trigger a special finisher animation for the other player. If it's a draw between both players, the player that was on his last life will respawn with zero health, meaning that they are also more prone to be eliminated.

### Ultimate Clash

If a player's ultimate attack collides with the opponent's ultimate attack, the player and the opponent will play the minigame, where the loser will be knocked off-stage and lose a guard point.

# Technical Design

## Controls

Blueprint X supports both keyboard and gamepad controls. Players can rebind keys and switch control schemes at any time.

## Default Inputs

| Action | Keyboard | Gamepad |
|---|---|---|
| Move | WASD | Left Stick |
| Jump | Space | A |
| Dash | Left Shift | Left Trigger (L1) |
| Quick Attack | J | X |
| Heavy Attack | K | Y |
| Ultimate Attack | L | Left & Right Bumper (L2 + R2) |
| Block | I | Right Bumper (R2) |
| Interact | E | B |

## Interaction System

Players can interact with the environment using a single Interact button. This includes:

- Picking up and throwing items (Bomb)
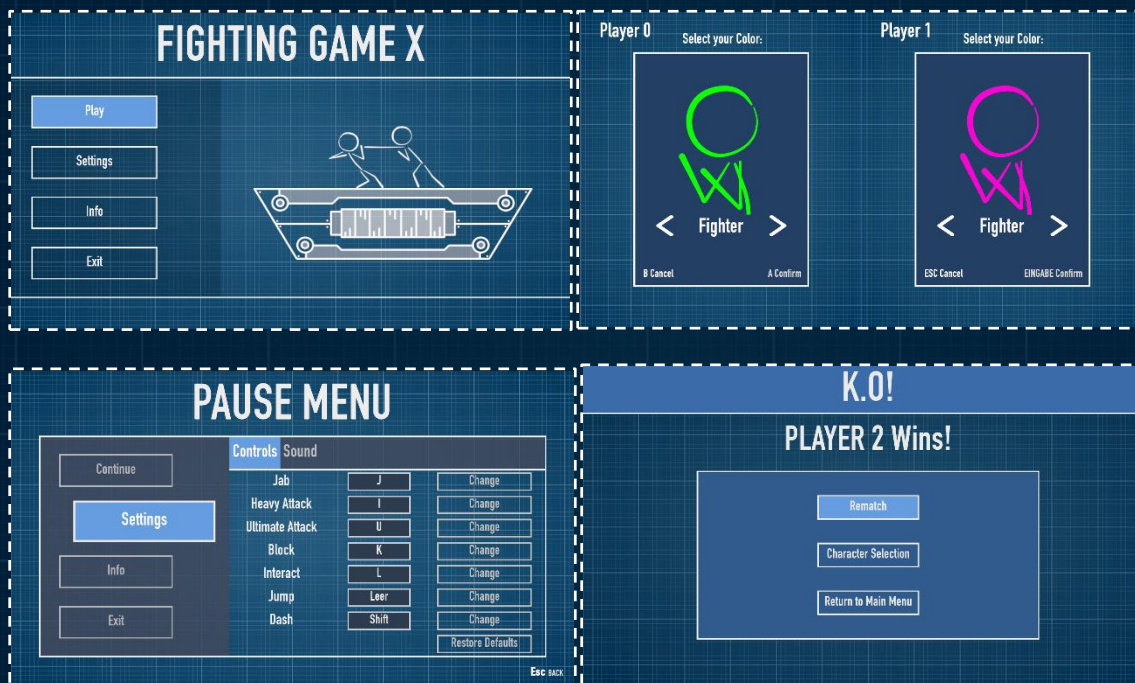- Activating platform triggers (through levers)

All interactive elements follow the same rule: press the "Interact" button near the object will either equip (grab a bomb) or trigger it (throw a bomb, activate a special platform).
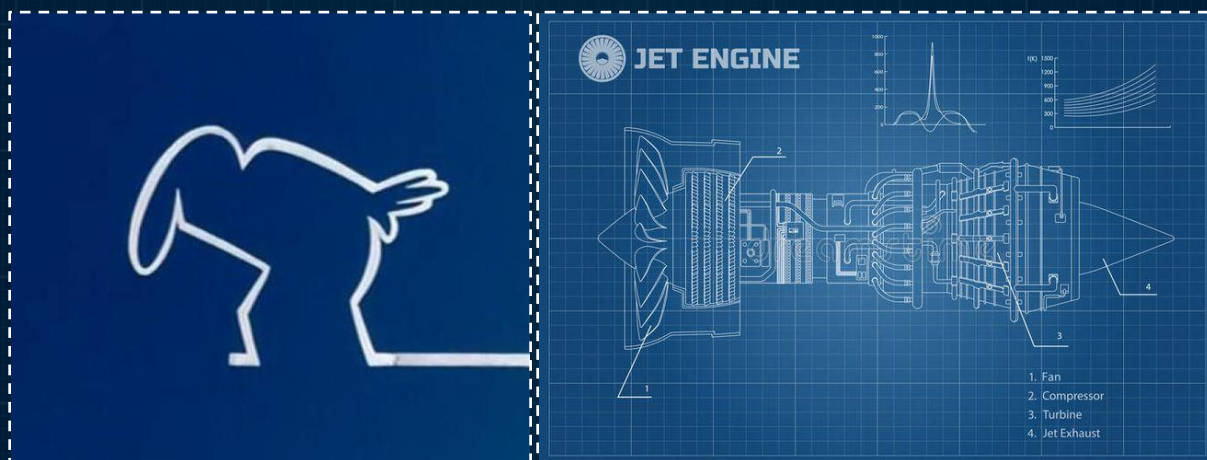
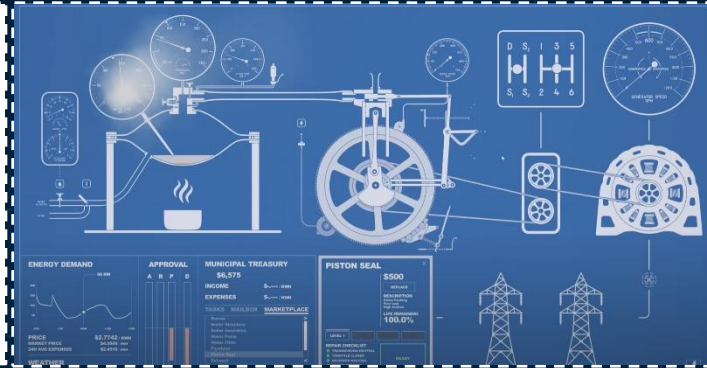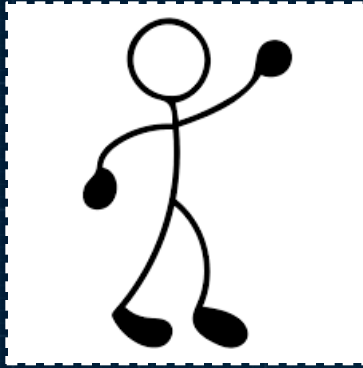# Aesthetics

## Setting & Style

The game itself doesn't have a specific story or set of characters, mainly because it aims towards a more abstract and imaginative setting: Hand-drawn stickmen fighting on a blueprint plan.
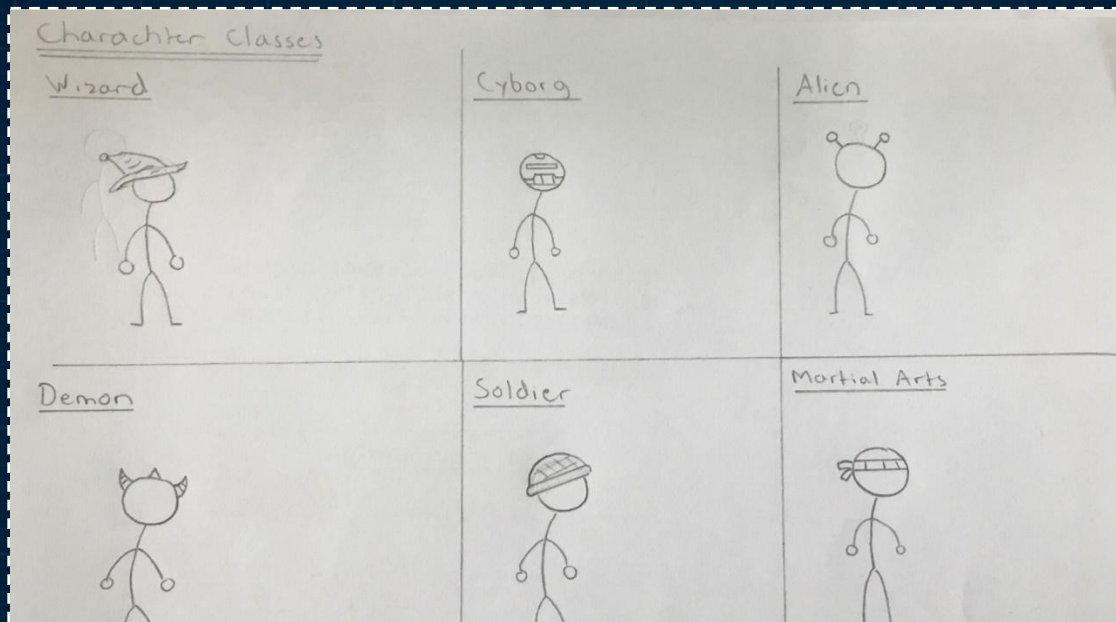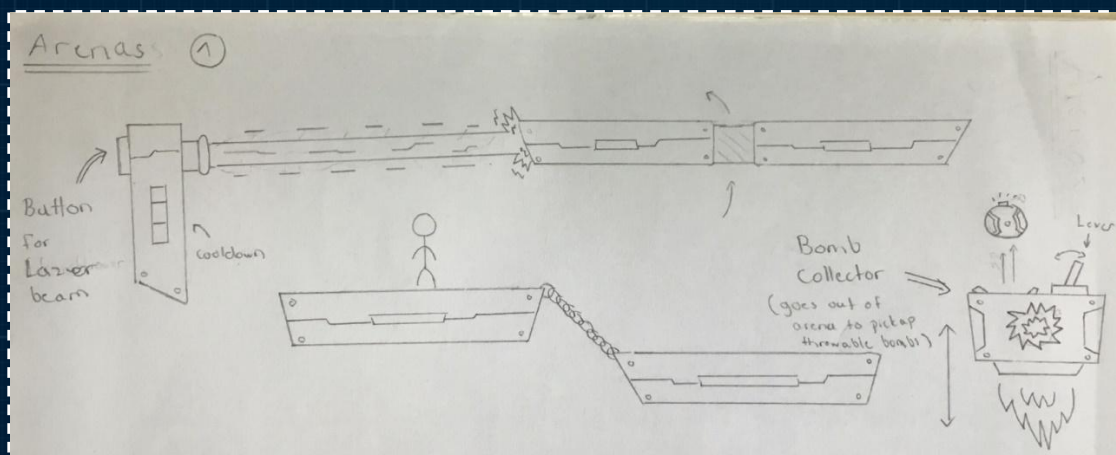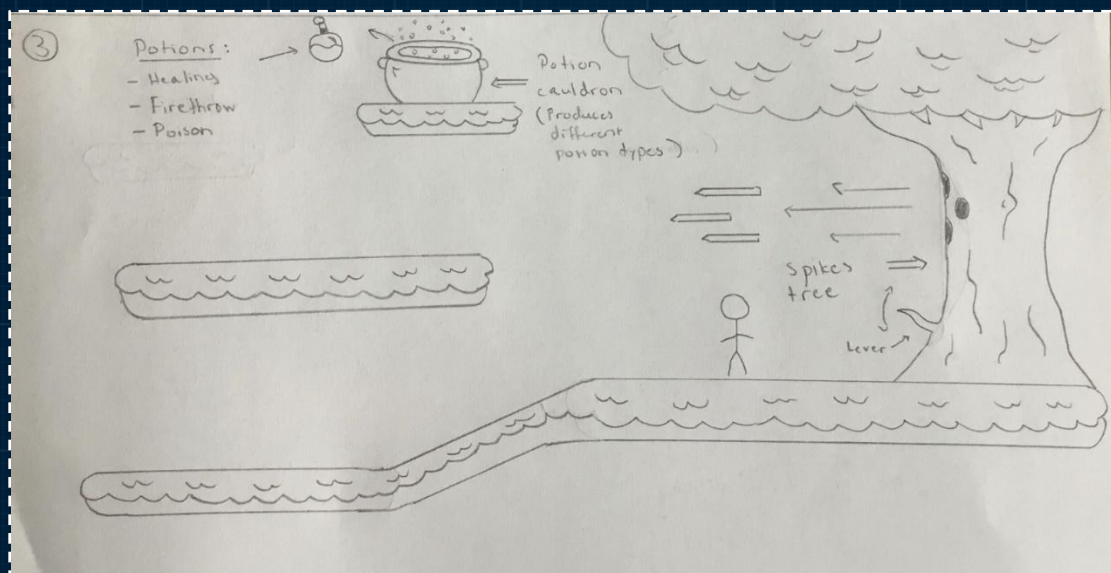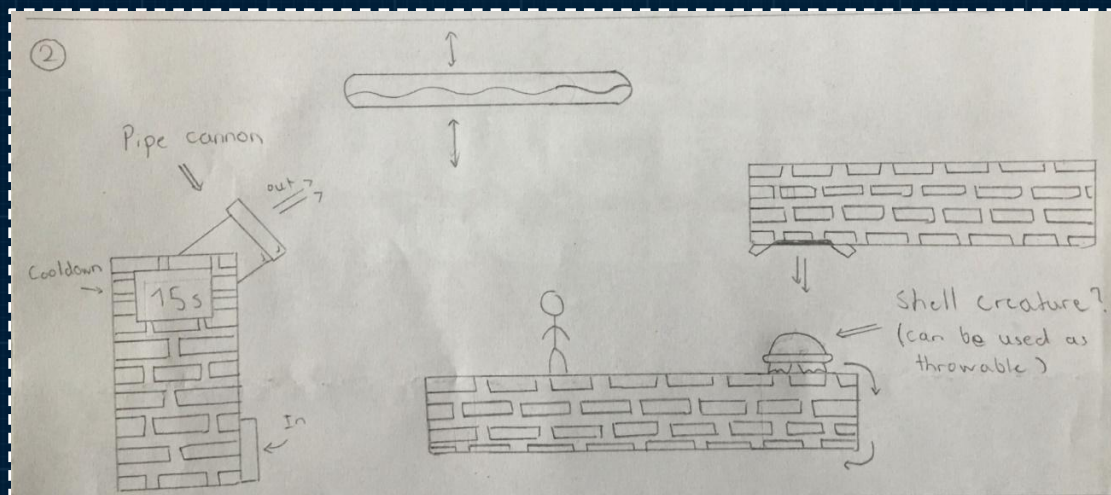
## UI Style



## Inspiration

## Sketches

### Possible Character Classes



### Arena Concepts

② Pipe cannon
out →
Cooldown → 15s
In ←

Shell creature?
(can be used as throwable)



③ Potions:
- Healing
- Firethrow
- Poison

Potion cauldron
(Produces different potion types)

Spikes tree

Lever →

# Minigame Idea



Mini Game ⇒ Quick Time Event on Final Life

P₁ 3 lives
100 HP

P₂ 1 life
0 HP

P₁        P₂

Something

Quick time event
z.B. rapid button pressing

P₁ wins

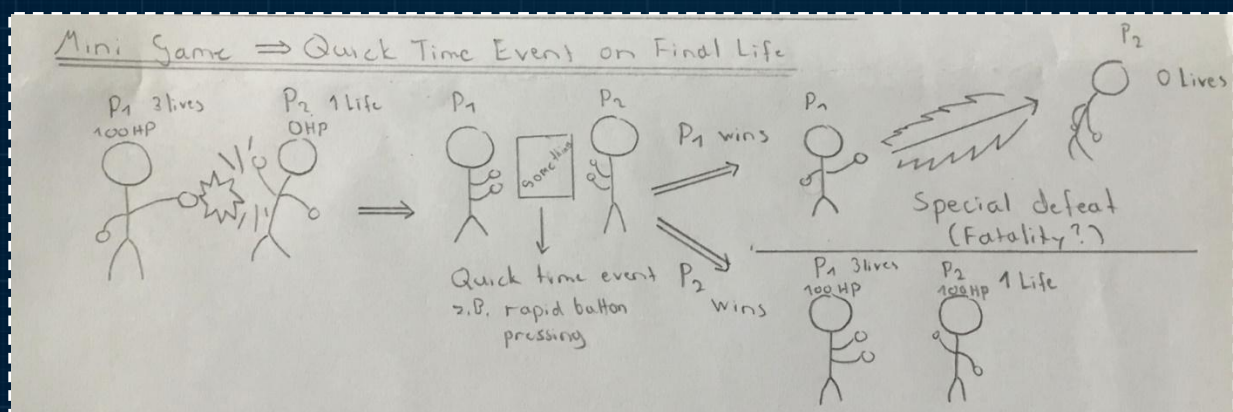P₂ wins

P₁ 3 lives
100 HP

P₂ 100 HP 1 Life

Pₙ

Special defeat
(Fatality?)

P₂ 0 Lives

# Bibliography

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- https://de.vexels.com/png-svg/preview/189928/stickman-vektor-pose