# Immune Rush


Developed By: Pawanrat Santiyanon

## Document History

| Version | Date | Summary | Author |
|---|---|---|---|
| 0.0.1 | 1/1/2020 | Initial Draft | Double Coconut |
| 0.0.2 | 1/10/2024 | Immune Rush Initial Draft | Pawanrat Santiyanon |
| 0.0.3 | 9/10/2024 | Immune Rush GDD for MVP | Pawanrat Santiyanon |

# Game Summary

Immune Rush is a top-down shooter game that takes place inside the human body. Players take on the role of a white blood cell tasked with defending the body from harmful pathogens like viruses, bacteria, and parasites. With fun, doodle-style visuals, players fight with the enemies, level up, unlock special weapons, and protect the body's organs.
Keys Features:

- Action, fast-paced gameplay.
- Educational, but lighthearted, exploring the human immune system.
- Doodle art style, making serious content playful and approachable.

## Target Platform

PC downloaded game via the Itch.io website.

## Business Model

This will be a free to play game.

## Audience

The game is aimed at casual to mid-core gamers who enjoy fast-paced action with light-hearted, approachable visuals. It may also attract educational or health-conscious audiences due to the immune system theme.

# Game Overview

## Theme / Setting / Genre

- **Theme:** Action-adventure, science-themed
- **Setting**: Inside the human body, fighting off pathogens.
- **Genre**: Top-down shooter.
- **Influences**:
    - *Crimson land* (Top-down shooter gameplay)
    - *Cells at Work!* (Anime about the human immune system)
    - *Battle Bunny* (Similar playful art style)

## Core Gameplay Mechanics

Players control a white blood cell, fighting off pathogens by shooting them, dodging attacks, collecting XP, and unlocking new perks and weapons.

- **Influenced by**:
    - Crimson land (survival shooter)

- **What's different:**
  - Educational elements tied into gameplay.
  - Progression through leveling and perks based on real immune system functions.
  - Doodle art style makes the serious setting more fun.

### Server / Online Mechanics

- No Online Features Planned for Launch

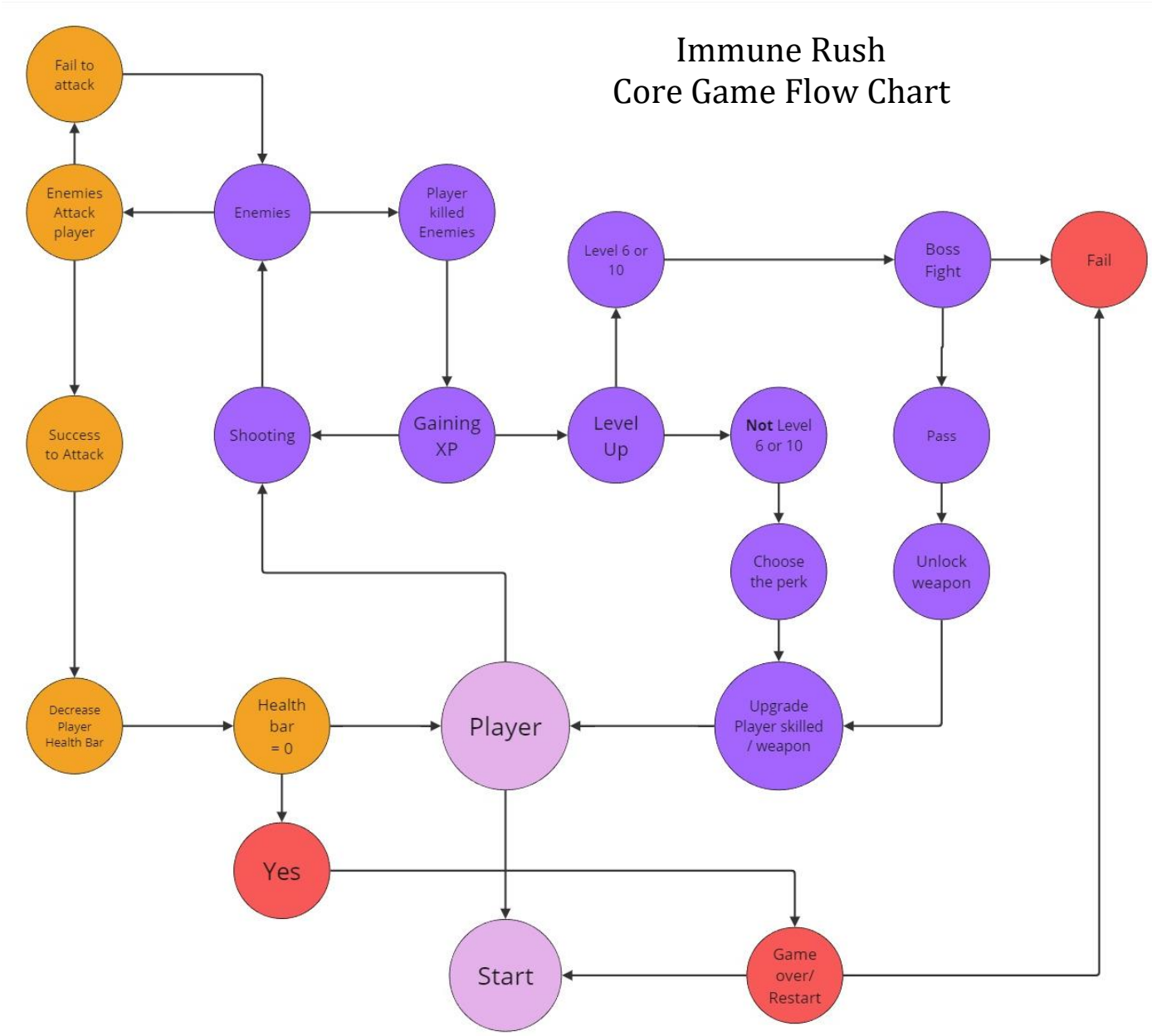
# Story and Gameplay

### Story

The player is a white blood cell, defending the human body from harmful pathogens. With each level, the immune system faces new threats in different parts of the body, such as the bloodstream, lungs, and stomach. The player must eliminate the infection to save the body.

### Core Gameplay

1. **Start Mission**: Fighting off enemies, gain XP from each kill.
2. **Kill Enemies**: Auto-shooting while controlling movement and dodging.
3. **Earn XP**: Killing enemies rewards XP, collect the XP to level up.
4. **Pick a perk:** After leveling up, players pick one of two perks to enhance their abilities.
5. **Boss Fight**: In levels 5 and 6, face off against a strong boss for a big XP reward.
6. **Rank Up:** Level up and unlock new weapons and skilled, prepare for the next levels.




## Meta-Games

- **Character Upgrades**: Players unlock new abilities by choose a perk that enhance the white blood cell's fighting capabilities.
- **Weapons**: Unlockable special weapons and skilled, each with different abilities (higher damage, expand shoot direction etc.).
- **Perks**: Health Boost, Faster Fire Rate, Movement Speed, XP Boost

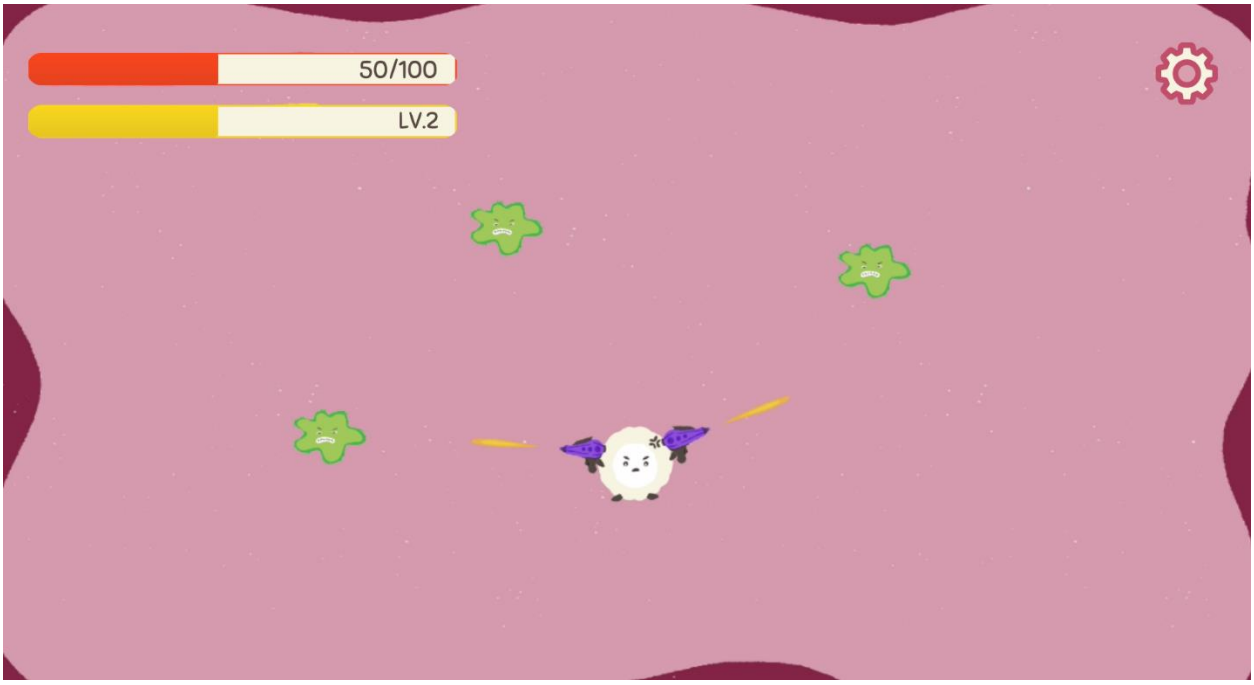
# User Interface / Screens

1. Main Menu

- Game Logo
- Play Now Button
- Settings Button
- Credits Button

2. Gameplay Screen

- Player health bar.
- XP bar with a number of levels.
- Setting button.




3. Choose Perks Popup

- Title “Choose Perk + Level number”.
- Two perks option button.
- Perks short description.

4. Unlock Weapon Popup

- Title “Unlock weapon + Level number”.
- New Weapon Unlock

### 5. Game Over Screen

- Back to main menu button.
- Try again button.

### 6. Settings Screen

- Setting music on/off
- Tutorial
- Restart button
- Exit the button

# Levels

Every 5 levels represent a different part of the body (e.g., bloodstream, lungs, stomach, brain), and the enemies and obstacles are themed around pathogens that affect those areas. Level get progressively harder with tougher and more enemies.

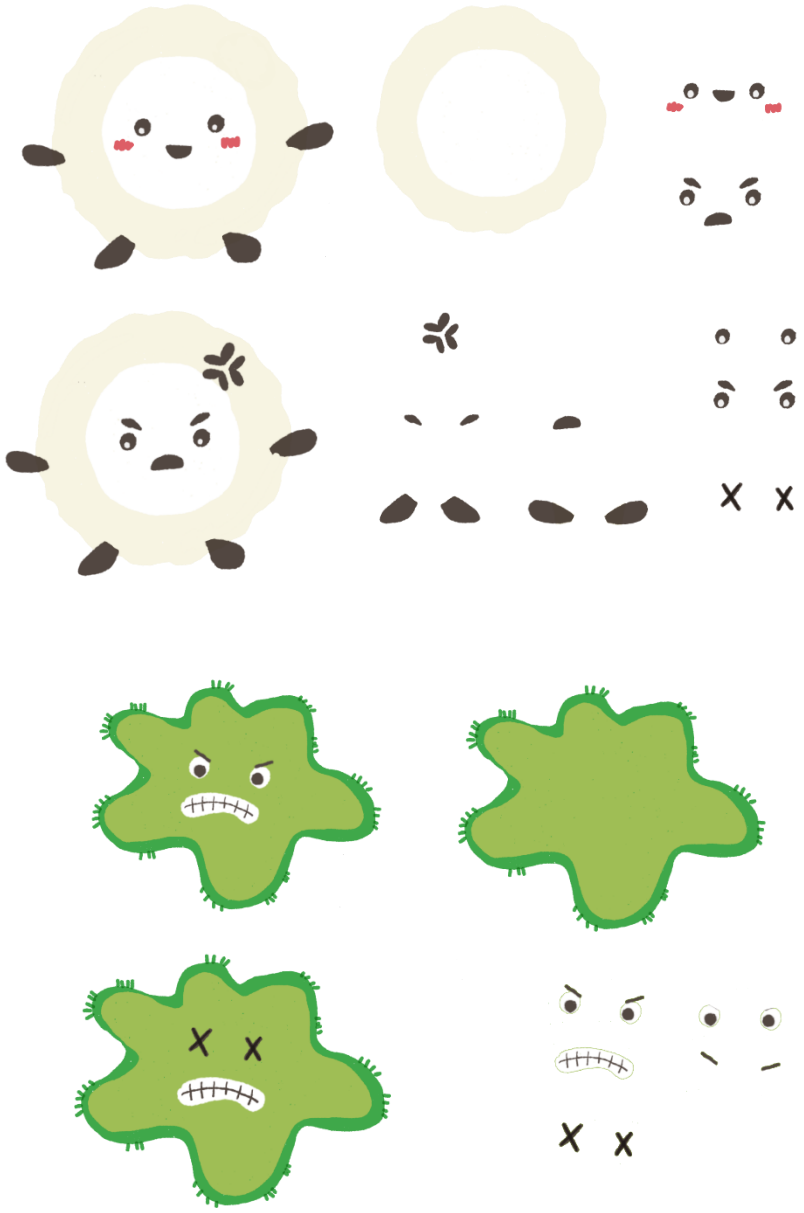
- **Number of Level**: 10 with increasing difficulty (with the potential to add more levels in the future).
- **Level Themes**: Every 5 levels take place in a different vital organ or system in the human body (bloodstream, stomach, lungs, brain, heart).
- **Difficulty Curve**: Starts simple, introduces harder enemies and more complex environments, ending with boss fights (large viruses, parasite).

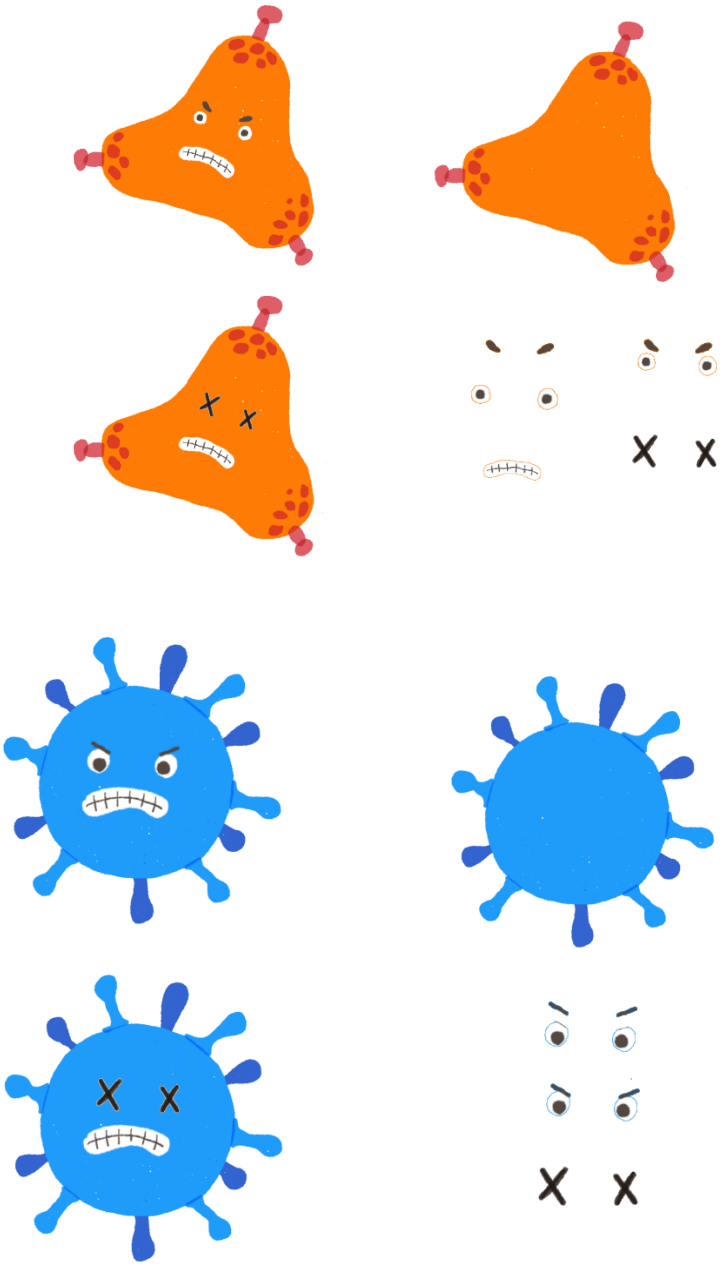
# First Time Experience

- **Tutorial**: Teaches basic movement and shooting mechanics, followed by upgrading weapons.
- **First Fight**: A simple battle in the bloodstream to introduce enemies and gameplay loop.

# Concept Art

- **Art style**
  - 2D doodle art style, focusing on hand-drawn characters and enemies.
- **Art Asset Version 0.1**
  - Create and design by Pawanrat Santiyanon






x2
XP


+ XP

# EXT and Wish

## EXT

- Additional levels, locations, and obstacles.
- Boss enemies with visible life bars.

## Wish

- Intro Storytelling: The story is told through cutscenes and in-game dialogue between the white blood cell hero, the captain of the white blood cell team, and the pathogens.
- Cutscenes: A cutscene introduces a new gameplay location every five levels.
- Ranking system to record the highest XP.
- More enemy variety.

# Team

## Team Wishlist for further Immune Rush development

- Art Designer
- Sound designer
- Marketing planner
- Project Manager
- Game designer and developer (Me)

# Schedule

Total Days for Immune Rush MVP is approximately 80 days of working with 6 milestones.

## Milestone 1: Game design and Concept Finalization – 10 Days

- Define core gameplay, enemies, weapons, perks, levels, and progression system– 3 days
- Define concept, art and style in more detail – 2 days
- Define scene and story of the game – 2 days
- Planning balancing design for enemies, weapons, perks – 1 day

- Define game economy XP system thresholds for each level – 2 days

## Milestone 2: Core Gameplay & Control Mechanics – 20 Days

- Player Movement
  - Walking – 1 day
  - Attacking – 1 day
- Auto Shooting Mechanics – 2 days
- Enemy basic AI.
  - Small Enemies (walking, chasing, attacking) – 2 days
  - Medium Enemies (walking, chasing, attacking) – 2 days
  - Big Enemies (walking, chasing, attacking) – 3 days
  - Enemy spawning system – 2 days
  - Collision/Hit Detection – 2 days
  - Enemy Testing and tuning – 1 day
- XP System gain when enemies are killed – 1 day
- Level system (Level up when reaching the XP threshold) – 2 days
- Perk system for each level up – 2 days
- HUD Design
  - Health Bar – 1 day
  - XP Bar – 1 day
  - Weapon cooldown – 1 day

## Milestone 3: Level Design & Progression– 15 Days

- Level 1-5 Design
  - Desing the bloodstream scene – 2 days
  - Enemies' placement for these levels – 2 days
  - Design level 1 with hints and guidance to introduce enemies and game mechanics – 2 days
- Level 6-10 Design
  - Desing the stomach scene – 2 days
  - Enemies' placement for these levels – 2 days
- Level difficulty progression
  - Set difficulty curve tougher enemies, number of enemies, obstacles for each level – 2 days
- Level Up Feedback (visual/audio effects) – 3 days

## Milestone 4: Boss Fights & Special Weapons– 14 Days

- Boss Fight Design
  - Design behavior – 2 days
  - Attack pattern – 2 days
  - Special effect – 2 days
  - Boss AI testing and tuning – 2 days
- Special Weapons Implementation
  - Unlockable weapons for players after defeating bosses in level 5 and level 10 – 2 days
  - Special abilities. (e.g., spread shot, heavy damage) – 2 days
  - Visual effects – 2 days
- Boss Fight Feedback (visual/audio effects) – 2 days

## Milestone 5: UI/UX & Menus – 10 Days

- Design and implement Main Menu, Setting and Game over Screen – 2 days
- Design and implement popup for level up, selecting perks and unlock special weapon – 2 days
- Design and implement Gameplay Screen with all elements – 2 days
- Sound effect for each scenes and actions – 4 days

## Milestone 6: Final Testing & Optimization – 9 Days

- Playtesting all game mechanics, enemy, perk, boos fight and unlock weapon – 3 days
- Fix all the bugs found during playtesting – 3 days
- Optimize the performance with a target platform (PC via Itch.io) – 2 days
- Final check and polish – 1 day