Title Page

VIRUS SPREAD

– Perhaps also add a subtitle or high concept sentence.

Author

date

Copyright Information

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The Game Design Document (GDD) it the blueprint from which a computer or video game is to be built. As such, every single detail necessary to build the game must be addressed in the document (or support documents). If it’s not in the document, then it probably won’t be in the game.

Below you will find an outline for a generic Game Design Document. The problem is that no generic GDD will be able to address all the various genres for which a game may be created. For example, consider the games PacMan, SimCity and Doom. All three games required detailed design documents, but if you think about it, those documents would be entirely different! As such, when using the outline below you will find sections that will be totally meaningless to your game. But also, there will be sections that your GDD requires to describe the game. Just because it’s not in my outline, it doesn’t mean that it doesn’t belong.

The GDD is a reference document. Members of the development team will constantly be using the document to find specific information for their specific needs. Consider the size such a document may grow to in order to document every piece of the game. We don’t want the GDD to cause information overload and then become a prop under somebody’s wobbly desk. As such it is important that you organize and format the document to make it easy to use. Also note that some of these sections might not appear in the GDD itself but instead would appear in supplemental documents such as an Art Bible or Test Plan. This helps make the overall document more manageable and readable.

One last comment, a game design document is meant to be a living document. Just as when the artist changes the design of his painting every time he takes his brush to the canvas, a computer or video game evolves as code and art are created. The GDD then is the communication tool from which all the members of the team can follow that evolution.

**Document Revision history:**

|  |  |  |  |
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| Version | Date | Author(s) | Changes |
| 0.2 |  |  |  |
| 0.3 |  |  |  |
|  |  |  |  |

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# Section I - Game Overview

## Game Concept

"Viral Spread" is a fast-paced, tactical 2D arcade game where players control a virus aiming to infect all areas of a "window," a representation of a biological cell. The player must avoid bouncing white blood cells and capsules that clear infected areas while strategically using a teleport mechanic to outmaneuver threats and achieve their goal.

## Design History

Version 1.0 : Initial concept with core mechanics of infection and avoidance.

Version 1.1 : Introduced capsules that clear infected areas.

Version 1.2 : Added teleport card feature for strategic depth.

## Feature Set

Real-time action with tactical teleportation.

## Genre

Tactical Arcade/Action Strategy.

## Target Audience

Casual gamers, fans of arcade-style games, ages 10 and above.

## Game Flow Summary

Players control the virus with directional inputs and strategically place a teleport card. They must navigate the game window, infecting areas while avoiding obstacles. Capsules and white blood cells dynamically change the game state, providing both challenges and opportunities for strategic play.

## Look and Feel

Biological, with stylized representations of white blood cells and viruses. Lighthearted and fast-paced. Minimalist with vibrant colors to represent infection zones, hazards, and player actions.

## Project Scope

### Number of locations

Single "window" environment.

### Number of levels

5 progressively challenging levels.

### Number of NPC’s

None (hazards are non-sentient objects).

### Number of weapons

None (could add entity that can kill white blood cells)

### Etc.

# Section II - Gameplay and Mechanics

## Gameplay

### Game Progression

Players progress through levels with increasing hazard density and complexity.

### Mission/challenge Structure

Infect all areas of the window while avoiding white blood cells and capsules.

### Puzzle Structure

Strategic use of the teleport card to navigate hazards.

### Objectives – What are the objectives of the game?

Infect all areas without being hit by a white blood cell or cleared by a capsule.

### Play Flow – How does the game flow for the game player

Players alternate between infection strategy and quick reflex-based navigation.

(Could add the growth of the virus)

## Mechanics

Players lose if hit by a white blood cell. Capsules can reverse infection progress.

### Physics

Objects bounce dynamically off the "window" edges, with random velocity changes.

### Movement

#### General Movement

Arrow move the virus.

#### Other Movement

Teleportation is triggered with the "T" key.

### Objects

#### Picking Up Objects

None

#### Moving Objects

White blood cells: Bounce randomly.

Capsules: Move horizontally or vertically.

### Actions

#### Switches and Buttons

Place teleport card: “P” key.

Teleport: Press "T" to move to the card’s position.

#### Picking Up, Carrying and Dropping

None

#### Talking

None

#### Reading

None

### Combat

No combat; the challenge is in avoiding hazards and maintaining infection progress.

### Economy

None

## Screen Flow

### Screen Flow Chart

TO BE GENERATED

### Screen Descriptions

#### Main Menu Screen

Start Game, Options, Exit.

#### Options Screen

Level Option and Game Option

#### Etc.

## Game Options

Adjust difficulty (speed of hazards).

## Cheats and Easter Eggs

# Section III – Story, Setting and Character

## Story and Narrative

### Back story

A rogue virus escapes containment and embarks on a mission to spread infection.

### Plot Elements

Progress through increasingly defended windows to complete the infection cycle.

### Game Progression

### License Considerations

### Cut Scenes

#### Cut scene #1

##### Actors

##### Description

##### Storyboard

##### Script

#### Cut scene #2

etc.

## Game World

### General look and feel of world

A stylized, microscopic environment.

### Area #1

#### General Description

#### Physical Characteristics

#### Levels that use area

#### Connections to other areas

### Area #2

etc.

## Characters

### Character #1

#### Back story

#### Personality

#### Look

##### Physical characteristics

Virus (Player): A mischievous entity represented as a corona virus look

##### Animations

#### Special Abilities

Teleportation.

#### Relevance to game story

#### Relationship to other characters

#### Statistics

### Character #2

etc.

# Section IV – Levels

## Level #1

### Synopsis

### Introductory Material (Cut scene? Mission briefing?)

### Objectives

Infect 100% of the area.

### Physical Description

### Map

### Critical Path

Infect zones while avoiding hazards.

### Encounters

### Level Walkthrough

### Closing Material

## Level #2

etc.

## Training Level

# Section V - Interface

## Visual System

### HUD - What controls

Progress bar for infection, teleport card status, remaining lives.

### Menus

Simplistic design focusing on quick navigation.

### Rendering System

### Camera

### Lighting Models

## Control System

Keyboard inputs for movement, teleportation, and interaction.

## Audio

## Music

Upbeat and dynamic.

## Sound Effects

Feedback for infections, teleportation, and collisions.

## Help System

# Section VI - Artificial Intelligence

## Opponent AI

No strategic AI; hazards operate on randomized movement patterns.

## Enemy AI

N/A (hazards are preprogrammed objects).

## Non-combat Characters

## Friendly Characters

## Support AI

### Player and Collision Detection

Ensures responsive and accurate interactions between the virus and hazards.

### Pathfinding

# Section VII – Technical

## Target Hardware and operating system

PC / Windows

## Supported game controllers and peripherals

Keyboard

# Section VIII – Game Art

Only show concept art here (rough sketches)

## Concept Art

## Style Guides

## Characters

## Environments

## Equipment

## Cut scenes

## Miscellaneous