Touhou: Darkness of the Void

Author: Rodrigo Toledo Date: 11/04/2025

Copyright Information: N/A

Version 0.1(draft) October 10, 2005

By Mark Baldwin Baldwin Consulting http://baldwinconsulting.org

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:

Version	Date	Author(s)	Changes
0.2	January 16, 2013	Emile Cormier	
0.3	January 05, 2016	David Burchill	
1.0	April 11, 2025	Rodrigo Toledo	Finalized for my project

(Use word's "update table of contents" to generate / regenerate a table of contents.)

Table of Contents

1. Sect	ion I - Game Overview	. 7
1.1.	Game Concept	
1.2. Design History		7
1.3.	Feature Set	7
1.4.	Genre	
1.5.	Target Audience	
1.6.	Game Flow Summary	7
1.7.	Look and Feel	
1.8.	Project Scope	
1.8.1		
1.8.2		
1.8.3		
1.8.4	. Number of weapons	. 8
1.8.5	. Etc	. 8
2. Sect	tion II - Gameplay and Mechanics	. 8
2.1.	Gameplay	
2.1.1	· <i>•</i>	
2.1.2		
2.1.3	•	
2.1.4	. Objectives – What are the objectives of the game?	. 8
2.1.5		
2.2.	Mechanics	
2.2.1	. Physics	. 9
2.2.2	. Movement	. 9
2.2.3	. Objects	. 9
2.2.4	. Actions	. 9
2.2.5	. Combat	10
2.2.6	. Economy	10
2.3.	Screen Flow	10
2.3.1		
2.3.2		
2.4.	Game Options	10
2.5.	Replaying and Saving	
2.6.	Cheats and Easter Eggs	10
3. Sect	tion III – Story, Setting and Character	10
3.1.	Story and Narrative	
3.1.1	•	
3.1.2	·	
3.1.3		
3.1.4	•	
3.1.5		
3.2.	Game World	11
3.2.1	. General look and feel of world	11

	3.2.2.	Area #1	11
	3.2.3.	Area #2	12
	3.3.	Characters	12
	3.3.1.	Character #1	12
	3.3.2.	Character #2	13
4.	Sect	ion IV – Levels	12
	4.1.	Level #1	
	4.1.1.		_
	4.1.2	<i>,</i> ,	
	4.1.3	· · · · · · · · · · · · · · · · · · ·	
	4.1.4	•	
	4.1.5	,	
	4.1.6	•	
	4.1.7		
	4.1.8.		
	4.1.9	•	
	4.2.	Level #2	
	4.3.	Training Level	
_	٠.	•	
5.		ion V - Interface	
	5.1.	Visual System HUD - What controls	
	5.1.1.		_
	5.1.2.		
	5.1.3. 5.1.4.	5 - 7	
	5.1.4.		
	5.1.5. 5.2.	Control System	
	5.2. 5.3.	Audio	
	5.4.	Music	
	5. 4 .	Sound Effects	
	5.6.	Help System	
		• •	
6.		ion VI - Artificial Intelligence	
	6.1.	Opponent Al	
	6.2.	Enemy AI	
	6.3.	Non-combat Characters	
	6.4.	Friendly Characters	
	6.5.	Support Al	
	6.5.1.	,	
	6.5.2	Pathfinding	15
7.	Sect	ion VII – Technical	15
	7.1.	Target Hardware and operating system	15
	7.2.	Supported game controllers and peripherals	
8.	Coo+	ion VIII – Game Art	1 [
	8.1.	Concept Art	
	8.1. 8.2.	Style Guides	
	8.3.	Characters	
			± U

8.4.	Environments18	ì
8.5.	Equipment18	}
8.6.	Cut scenes	ì
8.7.	Miscellaneous18	;

1. Section I - Game Overview

1.1. Game Concept

A Touhou fan game set in Gensokyo, introducing a new character who has no memory of her origin and cannot see colors. For unknown reasons, everyone is hostile towards her. She must survive their attacks and uncover the truth behind her condition and arrival.

1.2. Design History

This is a living document and will change as you develop your game. This section maintains a history of any significant changes to your game.

1.3. Feature Set

- Bullet hell combat system with unique spell card mechanics
- Multiple characters to choose from
- Gradual narrative progression through levels and boss battles
- Spell card customization
- Secret unlockable level for highest difficulty completion
- High score system
- Replay system

1.4. Genre

Genre 2D Bullet Hell / Shoot-'em-up (Danmaku)

1.5. Target Audience

Touhou fans, bullet hell enthusiasts, anime gamers, and players who enjoy fast-paced, skill-intensive games.

1.6. Game Flow Summary

Movement using arrow keys or WASD. Shooting, spell cards, grazing, and other actions mapped to Z, X, C, and Left Shift. Players progress by defeating enemies and bosses while dodging intricate bullet patterns

1.7. Look and Feel

Anime-inspired black and white aesthetic, representing the protagonist's lack of color vision. Brightly colored spell cards and effects illuminate the screen, contrasting the base visuals.

1.8. Project Scope

The game will reveal the mystery of the protagonist's origins, culminating in resolving the situation.

1.8.1. Number of locations

Gensokyo, the Underworld, the Void

1.8.2. Number of levels

TBD

1.8.3. Number of NPC's

Considered ~12

1.8.4. Number of weapons

~10 spell card types

1.8.5. Etc.

Potential for difficulty modes, unlockable characters, and alternate endings

2. Section II - Gameplay and Mechanics

2.1. Gameplay

2.1.1. Game Progression

Players progress by clearing levels without losing all lives. Dying resets the level.

2.1.2. Mission/challenge Structure

Each level advances the story and contains increasing difficulty. Defeating a boss progresses the game.

2.1.3. Puzzle Structure

N/A

2.1.4. Objectives – What are the objectives of the game?

Defeat bosses and achieve the highest score possible.

2.1.5. Play Flow – How does the game flow for the game player

A consistent cycle of dodging enemy fire, collecting pickups, and defeating bosses.

2.2. Mechanics

What are the rules of the game, both implicit and explicit. This is the model of the universe that the game works under. Think of it as a simulation of a world, how do all the pieces interact? This can be a very large section.

2.2.1. Physics

Levels feel infinite until bosses are defeated. The player remains within the screen bounds. Bullet patterns are dense and precise.

2.2.2. Movement

2.2.2.1. General Movement

8-directional flight

2.2.2.2. Other Movement

Grazing slows movement and shows the hitbox for precise dodging

2.2.3. Objects

2.2.3.1. Picking Up Objects

Score items and spell card charges

2.2.3.2. Moving Objects

Items move with the screen during gameplay

2.2.4. Actions

2.2.4.1. Switches and Buttons

2.2.4.2. Picking Up, Carrying and Dropping

Magnetize all items with a key after the boss defeat

2.2.4.3. *Talking*

Progress dialogue with Z or SPACE, skip with X

2.2.4.4. Reading

Hide HUD with H

2.2.5. Combat

Bullet hell with diverse bullet patterns. Bosses have personality-reflective attacks.

2.2.6. Economy

N/A

2.3. Screen Flow

2.3.1. Screen Flow Chart

Main Menu > Character Select > Spell Card Setup > Difficulty Select > Gameplay > Score Screen > Retry/Quit

2.3.2. Screen Descriptions

What is the purpose of each screen?

2.3.2.1. Main Menu Screen

Start, Options, High-Score, Quit

2.3.2.2. Options Screen

Language, audio, resolution, key bindings

2.3.2.3. Etc.

2.4. Game Options

Key remapping, volume control, and ambiance tuning are available.

2.5. Replaying and Saving

Only high scores are saved. Each session starts from the first level. Replayability comes from different characters and difficulty modes.

2.6. Cheats and Easter Eggs

- Secret level unlocked by clearing highest difficulty
- Possible cheat codes: infinite lives and bombs

3. Section III – Story, Setting and Character

3.1. Story and Narrative

Specific details like scripts and cut scenes may not be in this document but be in the Story Bible.

TBD as a whole

- 3.1.1. Back story
- 3.1.2. Plot Elements
- 3.1.3. Game Progression

Narrative unfolds level by level through dialogues and boss fights

3.1.4. License Considerations

Touhou Project fan guidelines will be followed

3.1.5. Cut Scenes

```
3.1.5.1. Cut scene #1
```

3.1.5.1.1. Actors

3.1.5.1.2. Description

3.1.5.1.3. Storyboard

3.1.5.1.4. Script

3.1.5.2. Cut scene #2

etc.

3.2. Game World

3.2.1. General look and feel of world

A monochrome Gensokyo with magical color bursts from combat

3.2.2. Area #1

3.2.2.1. General Description

A void hard to tell where the protagonist is located

3.2.2.2. **Physical Characteristics** 3.2.2.3. Levels that use area 3.2.2.4. Connections to other areas 3.2.3. Area #2 etc. 3.3. Characters 3.3.1. Character #1 3.3.1.1. Back story Unknown origin, no memory 3.3.1.2. Personality Curious, confused, and determined 3.3.1.3. Look Pale, muted outfit, emotionless eyes 3.3.1.3.1. Physical characteristics Young female with monochrome aesthetic 3.3.1.3.2. **Animations** Floating idle, fast dodges, shooting effects 3.3.1.4. Special Abilities Grazing, spell cards, bullet pattern adaptability Relevance to game story 3.3.1.5. Main character

Encounters other Touhou characters maybe an antagonist to them

3.3.1.6.

Relationship to other characters

3.3.1.7. **Statistics** TBD 3.3.2. Character #2 etc. 4. Section IV – Levels 4.1. Level #1 4.1.1. Synopsis 4.1.2. Introductory Material (Cut scene? Mission briefing?) 4.1.3. Objectives 4.1.4. Physical Description 4.1.5. Map 4.1.6. Critical Path 4.1.7. Encounters 4.1.8. Level Walkthrough 4.1.9. Closing Material 4.2. Level #2 etc. 4.3. Training Level 5. Section V - Interface 5.1. Visual System 5.1.1. HUD - What controls Life count, bomb count, score, power 5.1.2. Menus

Standard menu with selectable buttons

5.1.3. Rendering System

2D sprite-based

5.1.4. Camera

Static camera centered on the world where the player is

5.1.5. Lighting Models

Contrast between monochrome and colorful bullets

5.2. Control System

Movement: Arrow keys or WASD

Shooting: SPACESoul Sense: X

Grazing: Hold Shift Bomb: C or custom key

5.3. Audio

Distinct sound cues for pickups, hits, spell card use

5.4. Music

Touhou-style BGM tracks per level/boss

5.5. Sound Effects

Bullet hits, grazing, boss dialogues, pickups

5.6. Help System

6. Section VI - Artificial Intelligence

6.1. Opponent Al

Bosses adapt bullet patterns over time. Certain bosses respond dynamically to player positioning.

6.2. Enemy Al

AI Fairies move in waves, shoot simple bullet patterns. Bosses use scripted behavior per phase.

6.3. Non-combat Characters

None confirmed yet

6.4. Friendly Characters

Possible ally appearances in dialogues

6.5. Support Al

6.5.1. Player and Collision Detection

N/A

6.5.2. Pathfinding

N/A

7. Section VII – Technical

7.1. Target Hardware and Operating System

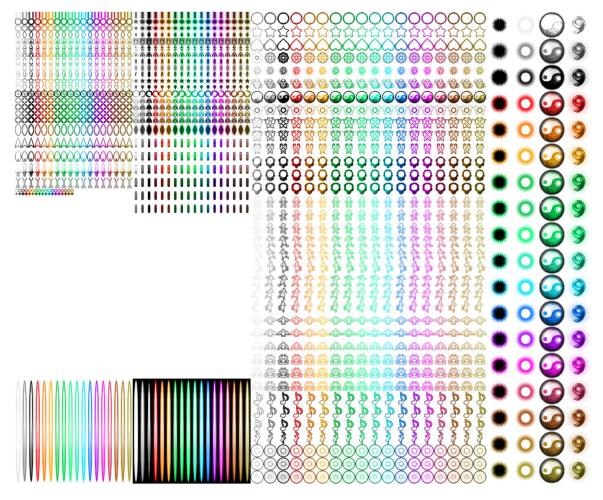
Any PC system

7.2. Supported game controllers and peripherals

8. Section VIII – Game Art

Only show concept art here (rough sketches)

8.1. Concept Art



8.2. Style Guides

8.3. Characters

- **& &**
- 2 2
- \$ \$ \$ \$
- 9 9 9

- **3**
- **F**
- **2**
- 8

- **8 8**
- 2 2

- **3**

- 8.4. Environments
- 8.5. Equipment
- 8.6. Cut scenes
- 8.7. Miscellaneous