**Knights of the Round**

# Design Document for:

# Teddy Knight

### An Epic Mind Heist Puzzle Platformer

"Bad to the Stuffing!"™

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Written by:  Daniel DeMaiolo, Derek DeMaiolo, Sandrine Do, & Adriel Flores Roman

Template by Chris Taylor

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# Design History

This section details any changes or modifications made to the game.  As the team continues to work, new versions will be updated.

The purpose of the design history is to allow for team members to see any modifications or changes that are made to the design document that could effect the overall game.  Without a design history, team members may not realize that something in the game has changed which could lead to inconsistencies in the design of the game.

**Version 1.1**

# Game Overview

# Goals

### Game Design Goal #1 - Mind Heist

After slipping into a deep coma, a young man named Theo begins having strange dreams about a Teddy Knight who protects him from the reaches of the Grim who can now claim his life after capturing his mind and splitting it into dreams..  In order to wake up from these dreams/nightmares, the player must guide Teddy Knight, the boy's last line of defense, and reunite his mind by collecting the three Pieces of Mind.

Together Teddy Knight and Theo's Soul will attempt to save the boy from the clutches of the Grim by delving into his subconscious. The gameworld will reflect dream-like environments with the bottom screen serving as a physical world with Teddy Knight while the top screen

## Game Design Goal #2 - Game Engine & Platform

The game is built in Unity and will run on both Windows and Mac platforms. This decision was chosen because the team is enrolled has the most experience with the Unity 3D Engine and could receive the most tech support while at Michigan State.

## Game Design Goal #3 - Dream within a Dream

The game world within *Teddy Knight* is interconnected between the real world, dream world, and nightmare world. By traversing each realm, the player guide the boy's soul and the Teddy Knight further and further down into the subconscious collecting a Piece of Mind. Once the the two characters are able to secure the level's Piece of Mind, they will return to the normal realm and begin another expedition for a Piece of Mind.

## Game Design Goal #4 - Parallelism and Puzzles

By manipulating two avatars through a level's series of puzzles, designers want the players to have a feeling of parallelism where one world is bright and cheery and the other is dark and twisted; furthermore, the player must learn how to use both to continuously unlock new things in the game.

## Game Design Goal #5 - Serious Goals

The designers will take two versions of the game, one controlled version and one experimental, to test for recall and effectiveness of branded objects appearing in a virtual environment. There will also be themes of life, death, and mental illness that hopefully can raise awareness among players.

## Common Questions

## What is the game?

*Teddy Knight* is a puzzle platformer that relies solely on the manipulation of two avatars, the boy's soul in the dream worlds and the Teddy Knight in the real and nightmare worlds, rather than a strong focus on action. Essentially, it's like a game version of the movie *Inception* where the player continues to descend in the boy's conscious mind until he/she can recover the three Pieces of Mind that will wake the boy up.

## Why create this game?

*Teddy Knight* is a very experimental indie game that will satisfy the requirements of the MA Project. This game takes unique mechanics which highlight the concept of parallelism among two avatars and two separate environments. The player then must figure out how to use each unique avatar in order to solve puzzles to let

the other avatar advance.  The game demands dualism and parallel teamwork throughout.

## Where does the game take place?

This game takes place in Theo's mind with three different realms:  the real world, the dream world, and the nightmare world.  The real world is simple and the starting point for Teddy Knight.  It always takes place in a hospital bedroom and shows the age progression of Theo as Teddy Knight recovers each Piece of Mind.  The dream world contains fantasy environments that are exaggerated and sometimes feature elements that do not belong.  This is the realm where Theo's spirit can manipulate the environment in order to impact Teddy Knight's current environment which will allow him to continue his quest.  The nightmare world is where Teddy Knight will encounter a twisted version of the dream world and fight a few monsters.  He will eventually need to manipulate the nightmare world in order to allow Theo's spirit to advance from one dream world to another.

## What do I control?

The player controls Teddy Knight and Theo's spirit.  Teddy Knight can attack physical enemies with his sword and manipulate physical environment (push lever, trigger button, move box).  Theo's spirit can possess certain environmental obstacles and enemies.  Although health hasn't been decided on yet, it is assumed as you get weaker, the worlds get blurrier.

## How many characters do I control?

As mentioned above, the player will control two characters:  Teddy Knight and Theo's spirit.  Teddy Knight will manipulate physical elements of the real and nightmare worlds which impact the dream world that Theo's spirit explores while Theo's spirit can inhabit elements which will allow Teddy Knight to advance.

## What is the main focus?

The player should navigate the hierarchy of dream sequences by controlling both avatars through puzzles and obstacles until they eventually reach the Piece of Mind.  After players collect all three Pieces of Mind, they have successfully awaken the boy from his coma and therefore beaten the game.  Players should strive to beat the game as quickly as possible because their completion time will effect how much the boy has aged.

## What's different?

Essentially, the duality between the two avatars and ability to advance through the multiple split screen frames is something that is unlike any other game.  While most games focus on enemies and boss fights, the game

focuses solely on the psychological and the abstraction of the mind - essentially there are no enemies or boss fights but only puzzles and obstacles players must figure out.  It is a mixture of platforming games such as *Super Mario Bros.* and puzzle games such as *Brain Age Academy*.

# Feature Set

## General Features

Split Screen
Dual control of two avatars (Teddy Knight and Theo's soul)
Parallelism between both avatars
2.5D Graphics
Object Manipulation (different for each avatar)
Brand Placement
Unique, surreal dream worlds

## Gameplay

Surreal and curious environments
Navigating one avatar from one dream to the next
Solving puzzles that make use of both avatars
Collecting the three Pieces of Mind
Side Scrolling Puzzle Platforming
Feeling of accomplishment, bewilderment, and critical thinking
Environment/Object Manipulation
Vertical level navigation
Consciousness Portals

## Victory Condition

After successfully managing to traverse the physical, dream, and nightmare realms and collecting the three Pieces of Mind, the player will successfully have set Theo free from his indefinite coma and beaten the game.

# The Game World

## Overview

The player essentially starts off in the hospital where they discover a boy has been comatized after an tragic accident.  As the story unfolds, players will navigate both the Teddy Knight and the boy's soul deeper

and deeper into the subconscious to collect the three Pieces of Mind.  The screen will always be split with Theo's soul being represented in the dream world and Teddy Knight in the nightmare version the world his counterpart is found in.  The two will essentially scaffold downwards by completing puzzles in their respective worlds to advance the other.

## World Feature #1

Unlike most games in its genre, *Teddy Knight* attempts to link two separate stages into one by having the two avatars manipulate one environment to influence the other.  For example, in one dream, the stage may abruptly end behind a wall with a switch while the other dream is blocked off by a locked gate.  By using Theo's soul to float through the wall in Dream A to hit the button, Dream B's locked gate will now open and Teddy Knight may advance.  This type of cause and effect level design should create interesting puzzles and creative ways to descend through each dream sequence to the coveted Piece of Mind.

## World Feature #2

Beyond the vertical level design, the worlds have a symbiotic relationship to one another by having a themed stage as a dream world and one as a nightmare world.  The two should be mirrors of one another as one might be a jungle theme for example while the other might be a twisted, nightmarish version instead.  Some of the puzzle designs throughout the game will be figuring out what shapes resemble other objects in the game (example:  a coconut tree in the jungle dream may represent an IV unit in a hospital) so that the puzzles can be solved.  This type of unique pattern recognition should enable variance in the gameplay.

# The Physical World

## Overview

The physical world consists of multiple real, dream, and nightmare worlds which change as the player continues to advance throughout Theo's mind.  The player will always see a real/dream world combo or a nightmare/dream world combo throughout the course of the game.

The following describes the key components of the physical world.

## Key Locations

- **St. Mary's Hospital** - this location is where Theo's body rests.  Teddy Knight brings the three Pieces of Mind to this place in order to revive Theo.

- **Deadman's Cove** - set on a tropical island in the Caribbean, this location features pirates, mermaids, skeletons, and plenty of lush jungles to explore. Acting as Blackbeard, Teddy Knight will travel deep within the island to find Piece of Mind #1.

- **Grimm's Hollow -** inspired by the tales from the Brothers Grimm, Grimm's Hollow is a small village nestled away in a forest shrouded by mystery. Acting as Van Helsing, Teddy Knight must slay monsters and search within the small village for Piece of Mind #2.

- **Noir Nights -** created in vintage noir style, Teddy Knight assumes the role of a gumshoe trying to uncover the mysteries of this strange black and white world. He even may encounter classic cartoon and comic characters that were created with this black and white art style.

- **Masquerade Madness -** set in medieval Venice during Carnival, Teddy Knight, looking like he walked out of an *Assassin's Creed* game, must use stealth in order to discover the secrets of this world.

- **Cirque du Cretaceous -** part theme park, part circus, part biology experiment gone horribly awry, Cirque du Cretaceous is home to some of the oldest living reptiles (many believed to be extinct) and zaniest amusement park this side of strange. During the dream stage, the Cirque seems fun in a bizarre way, but when nightmares rise, fossils, clowns, and killer attractions give the ringmaster Teddy Knight a wicked experience he'll never forget.

- **8-Bit World -** Teddy Knight is sucked into a world which is comprised of video game environments and characters. Who will he find? Mario, Link, Donkey Kong, Sonic, Pac-Man? Teddy Knight also has an interesting Tron design.

- **Showdown at Wounded Stitching -** Teddy Knight takes to the old west and must solve the puzzles of the old dusty ghost town.

- **Knights of the Round Button -** Set in a medieval setting, Teddy Knight must explore a medieval castle in search of a valuable key to advance to the next dream stage. Similar to the scene from Shrek where you cross a bridge to a castle with a dragon.

## Travel

The screen will be split into two sections, one nightmare panel and one dream panel. Players will guide Teddy Knight and Theo's soul from left to right in a traditional linear side-scrolling fashion. Players will often have to solve one puzzle in one panel in order to advance the other avatar to the next. Essentially, players will continuously guide the avatars downwards in a vertical fashion skipping every other panel.

In other words, Teddy Knight may start in Panel A (real world), but after Theo's soul solves a puzzle in Panel B (dream world), Teddy Knight may advance from the initial panel to the next unoccupied panel, Panel C (nightmare world). In a like fashion, it will be Teddy Knight's turn to now solve a puzzle in Panel C (nightmare world) that will allow Theo's soul in Panel B (dream world) to advance to Panel D (a different dream world). The process repeats until all three Pieces of Mind have been collected at the deepest level of the subconscious.

### Scale

The scale will be average size like most platforming games. The game's overall sense of scale will probably resemble *Super Mario Bros.* where the height of the level can be depicted on screen and nothing is too large for the character.

### Objects

**Piece of Mind -** rare and essential for waking up Theo from his coma; there are three of these in total and they are usually found at the end of a nightmare section of the dream world

**Excalibear -** Teddy Knight's nightmare slaying sewing needle (he thinks it's a sword - whatever works for him); essentially for attacking enemies and triggering switches that help advance Theo's soul.

**Door Switches -** by triggering one of these, a door in the other realm will unlock and the other avatar may advance to the next sequence

**NPCs -** These characters interact with Teddy Knight and Theo's soul and often will trade items in order to allow him to advance.

**Keys -** Unlock gated doors or passages that prevent Teddy Knight and Theo's soul from advancing

### Day and Night

Although there is no current day and night system in place, most nightmare levels will take place at night and dreams will usually be lighter toned and most likely taking place during the day.

### Time

Time will advance based on the player's progression through the game. For example, after Teddy Knight returns to the real world, he will see Theo's body has aged.

# Rendering System

### Overview

The game will be rendered by using occlusion culling with a split screen dividing the two different realms Teddy Knight and Theo's soul occupy. The game will be rendered in Unity 3D game engine.

# 2D/3D Rendering

Unity 3D's rendering engine will be used with some occlusion culling.

# Camera

## Overview

Essentially, the player will have the ability to change camera views from Teddy Knight and Theo's soul by toggling between the two avatars. When one avatar is selected, the camera follows that avatar. As the two avatars advance further down into the subconscious, the camera will eventually slide down the vertically designed level to show only two panels on screen at a time while the other slips upwards and off screen.

## Character Selection

Because the player has the option to alternate between avatars (and hence realms) to solve puzzles, the camera will either focus on Teddy Knight or Theo's soul depending on where they are. The cameras will toggle back and forth depending on which character has been selected. The camera will follow the one of the avatars, Teddy Knight or Theo's soul, with a slight look ahead function to allow for a better view of the level. This view will be cheated slightly above the avatar in order to help "map out" the level for the player.

## Diving into the Subconscious

As players advance from dream world to dream world, the two avatars will appear on every other panel. For example, Teddy Knight will start in the real world and Theo's soul will start in Dream #1. As Theo commits an action in Dream #1, Teddy Knight's access from the real world to Nightmare #1 will be granted and he will end up going down to the the third panel. In this situation, the camera will either slide down the tower of panels to show only two screens at once or Camera #1 which originally depicted the first two panels will be shut off and Camera #2 that shows only panel 2 and panel 3 will be turned on.

# Game Engine

## Overview

For the purpose of this project we are using Unity 3D. Unity 3D has a very approachable feature set that is perfect for the purposes of our game.

## Water

Unity has several options for rendering water within the scene, as well as particle effects. It will be

straightforward for the team to create cartoony or reflective water.

### Collision Detection

Collision detection is easy to implement using colliders and Rigid Body physics within Unity. The physics engine allows more than one way for collision detection to be used to enhance features of the game. It will probably be handled by using some form of raycasting.

# Lighting Models

### Overview

We are using the lighting system built into Unity. If performance becomes an issue, there are several opportunities to improve it within Unity. We also want to try some unique highlight effects to get a dream sequence.

### Directional Lighting

The team is using directional lighting to light our world like natural sunlight or moonlight depending on the dream/nightmare sequence.

### Point Lighting

The team will also use point lights to create an effect for certain objects such as fire and other objects that have light.

# The World Layout

### Overview

The world is set in Theo's mind which is built very much like a tower. In order to advance from one level to another, Teddy Knight and Theo's soul must work together.

# Game Characters

### Overview

- **Teddy Knight -** one of the two main protagonists who is fighting to free Theo. His costume changes based on the nightmare he is in.

- **Theo's Soul** - the apparition of Theo that is able to still function, he can inhabit objects and enemies in order to aid Teddy Knight. He is trying to break free from the prison of his coma.

- **NPCs** - while no specific NPCs have been created yet, some will appear thematically based on the dream/nightmare.

## Enemies and Monsters

The enemies and monsters will function more as obstacles than actual threatening creatures. This will emphasize more on puzzle solving than action. The enemies and monsters will also be created thematically.

# User Interface

## Overview

The UI is meant to be simple and follow a similar model to the game Symon where the player can at all times see the collected inventory. Because the game focuses much more on puzzle solving than action, it should be intuitive and inviting. The team also wants to make the menus more interactive and containing 3D models.

- Main Menu GUI - Start, Load, About, Credits
- About GUI - How to Play, Story Overview
- Credits GUI - Team Roles
- Pause Menu GUI - Resume Game, Quit Game
- Game Over GUI - Teddy Knight collapsing
- End Game GUI - Scene of Theo being set free

# Weapons

## Overview

Since there is very little emphasis on action, the only "weapons" that will be in the game are Excalibear, Teddy Knight's trust sword, and the ability for Theo's Soul to inhabit objects.

## Weapons Details #1 - Excalibear

Excalibear can remove certain enemies and impact the environment (such as cutting through vines).

### Weapons Details #2 - Theo's Soul

Theo's soul can inhabit different objects in the environment and can use them in self-defense. Also, he can inhabit certain enemies.

# Musical Scores and Sound Effects

## Overview

Music and sounds will be created using digital composing tools. 3D sounds will be created using the Unity engine. The soundscape will be epic/heroic but also reflect a very somber mood.

## Soundtrack Pro

Soundtrack Pro will be used to create original pieces of music and soundeffects.

## 3D Sound

Music and sounds will be created using digital composing tools. 3D sounds will be created using the Unity engine. The soundscape will be cartoony and heroic.

## Sound Design

The game is very somber and spooky at times which demands a very eerie yet reflective sound design.