

# Game Design Document

### **Phoenix Feather Studios**

#### Version 1.0

Position Title	Name	Signature
Assistant Producer	Ben Roye	
Level Designer	Raul Siqueira	
Level Designer	Christopher Burris	
Artist	Zachary Strambaugh	
Programmer	Thoman Robbins	

## **Document Revisions Table**

Version	Description	Requestor	Date
1.0	Initial Document	Professor Stringer	10/18/2012

## **Table of Contents**

Table of Figures	5
Concept	7
High Concept	7
Game Description	8
Game Goals & Features	8
Story Synopsis	8
Style and Tone	8
Gameplay Minute	9
Story/Backstory	13
Gameplay	14
Core Gameplay Mechanics	14
Player's Objective	15
Primary Objectives	15
Secondary Objectives	15
Main Character: The Dragon King	16
Dragon King Concept	16
Player Movement/Interactions	17
Weapons	18
Enemy/Secondary Characters	19
Cloud Monkeys	19
Death Lanterns	20
The Monkey King	21
Enemy Movement/Interactions	22
Skills System	24
Objects System	25
Pick-ups System	26
The Spread-Shot	26
The Chi Burst	27
Thunder Storm	28
Talismans	29
Health System/Checkpoint System	30

HUD/Camera	31
Lives	31
Score	32
Time	32
Thunder Storm	33
Camera	33
Controls	34
World Layout	35
Game World Overview	35
Level Descriptions	36
Level 1: Open Sky	36
Level 2: Showdown	39
Menu System	42
Installation	43
Title Splash Screens	43
Main Menu	44
Controls Screen	45
Credits Screen	45
Exit/Pause Screen	46
Game Over Screens	46
Intro/Level-to-Level/Outro Cut-Scenes	47

## **Table of Figures**

Figure 1: High Concept courtesy of Zachary Strambaugh	7
Figure 2: Gameplay Minute – Enemy Formations courtesy of Zachary Strambaugh	9
Figure 3: Gameplay Minute – Enemy Bullets courtesy of Zachary Strambaugh	9
Figure 4: Gameplay Minute – Combat courtesy of Zachary Strambaugh	10
Figure 5: Gameplay Minute – Enemies Shifting Realms courtesy of Zachary Strambaugh	10
Figure 6: Gameplay Minute - Player Shifting Realms courtesy of Zachary Strambaugh	11
Figure 7: Gameplay Minute – Finishing Off Enemies courtesy of Zachary Strambaugh	11
Figure 8: Gameplay Minute – Defeating Enemies and New Enemies courtesy of Zachary Strambaugh .	12
Figure 9: Core Gameplay Mechanics Flowchart	14
Figure 10: A concept of the Dragon King, as he appears in the physical and spiritual realms; Courtesy	of
Zachary Strambaugh	
Figure 11: Player Movement and Interactions Table	17
Figure 12: Cloud Monkey Concept courtesy of Zachary Strambaugh	19
Figure 13: Death Lantern Concept courtesy of Zachary Strambaugh	20
Figure 14: Monkey King Holding the Rod courtesy of Zachary Strambaugh	21
Figure 15: Cloud Monkey Movements and Interactions	22
Figure 16: Death Lantern Movements and Interactions	22
Figure 17: Monkey King Movements and Interactions	23
Figure 18: Spread-Shot Icon courtesy of Zachary Strambaugh	26
Figure 19: Chi Burst Icon courtesy of Zachary Strambaugh	27
Figure 20: Thunder Storm Icon courtesy of Zachary Strambaugh	28
Figure 21: Talisman Icon courtesy of Zachary Strambaugh	29
Figure 22: Enemies/Health Points/Score Points	30
Figure 23: Pre-defined Times to Complete the Sections in Order to Get Bonus Points	30
Figure 24: Overview of the HUD courtesy of Zachary Strambaugh	31
Figure 25: Lives courtesy of Zachary Strambaugh	31
Figure 26: Score courtesy of Zachary Strambaugh	32
Figure 27: Score Table	32
Figure 28: Time courtesy of Zachary Strambaugh	
Figure 29: Thunder Storm courtesy of Zachary Strambaugh	
Figure 30: Controls	34
Figure 31: Keyboard Controls	
Figure 32: Game World Overview Flowchart	
Figure 33: Open Sky Environment Concept courtesy of Zachary Strambaugh	
Figure 34: Level 1 Overview Map	
Figure 35: Sky Level Color Swatch/Palette	
Figure 36: Showdown Environment Concept courtesy of Zachary Strambaugh	39
Figure 37: Level 2 Overview Map	40
Figure 38: Chaotic Level Color Swatch/Palette	41
Figure 39: Menu System	42

Figure 35: Install, Desktop, Start Menu, & Short-cut Icon; Courtesy of Zachary Strambaugh	43
Figure 36: Uninstaller Icon courtesy of Zachary Strambaugh	43
Figure 37: GuildEd/Guild Hall Splash Screen	43
Figure 38: Team Splash Screen courtesy of Zachary Strambaugh	44
Figure 40: Main Menu Concept courtesy of Zachary Strambaugh	44
Figure 41: Controls Screen courtesy of Zachary Strambaugh	45
Figure 42: Credits Screen Concept courtesy of Zachary Strambaugh	45
Figure 43: Exit/Pause Screen Concept courtesy of Zachary Strambaugh	46
Figure 44: Lose Screen Concept courtesy of Zachary Strambaugh	46
Figure 45: Victory Screen Concept courtesy of Zachary Strambaugh	47
Figure 46: Intro Screen Concept courtesy of Zachary Strambaugh	47

## Concept

### **High Concept**

Revenge of the Dragon King is a two-dimensional, side scrolling bullet-hell shooter in which the player shifts between the physical and spiritual realm to avoid bullets and kill all the enemies in each combat section in order to progress through the levels. The game has a funny vivid cartoony style for both the characters and background.

Based in the Chinese mythological tale "Journey to the West", the story of *Revenge of the Dragon King* is a tale about how the Monkey King tricks the Dragon King of the East Sea and subsequently takes the pillar that controls the ebb and flow of the ocean tides. In this adaptation of the tale, the player controls the Dragon King in his journey after the Monkey King to retrieve the pillar to his palace and bring balance back to the ocean.

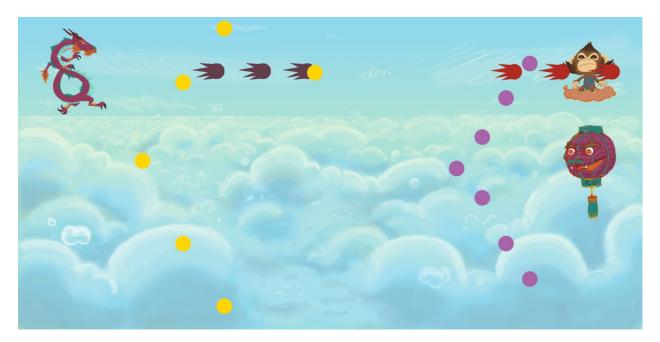


Figure 1: High Concept courtesy of Zachary Strambaugh

#### **Game Description**

#### **Game Goals & Features**

The Dragon King battles through waves of the Monkey King's minions in order to retrieve the staff. He stays mainly to the left side of the screen while enemies spawn on the far right. The player engages them in battle by firing bullets and other special attacks at them. Enemies appear in formations and move around on the right portion of the screen. When the player destroys enemies, more spawn and move onto the screen to replace them. If a single bullet hits the Dragon King, he loses a life. When all the Dragon King's lives are gone, the player must start the level over. The player avoids incoming bullet attacks by moving around the screen and using the ability to shift between the physical realm and the spiritual realm.

The game's core mechanic is the Dragon King's ability to shift between the physical realm and the spiritual realm; enemies also exist in one of these two realms. When the Dragon King is in the physical realm, he can damage physical enemies and physical enemies can damage him. When the he is in the spiritual realm, he can damage spiritual enemies and spiritual enemies can damage him. If the Dragon King is in the opposite realm of an enemy, he cannot damage them and he absorbs their bullet attacks. Absorbing bullets of the opposite realm serves two functions. First, absorbing bullets gives the player points. Additionally, the player can earn points by destroying enemies, acquiring pick-ups, and completing level sections and entire levels within predefined times. If the player gathers enough points, they receive an extra life.

The Dragon King continues to destroy minions until he comes up against a considerably more difficult fight at the end of the level. Once the player wins this fight, the level ends and the Dragon King advances to the next level.

#### **Story Synopsis**

The game's story derives from the Chinese mythological tale "Journey to the West" where the Monkey King tricks the Dragon King of the East Sea and takes the pillar that controls the ebb and flow of the ocean tides. In this adaptation of the tale, the player controls the Dragon King in his journey after the Monkey King to retrieve the pillar to his palace and bring balance back to the oceans.

#### **Style and Tone**

The revenge of the Dragon King uses a cartoony Chinese style theme. See pictures throughout the Game Design Document for examples. Game music includes traditional Asian sounds and vibes.

## **Gameplay Minute**



Figure 2: Gameplay Minute – Enemy Formations courtesy of Zachary Strambaugh

1. Combat begins and the player is up against three enemies. The enemies spawn on the right portion of the screen. The enemies do not move and remain where they spawned until the player defeats them.

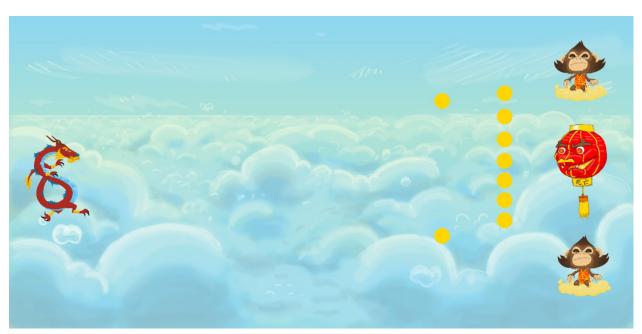


Figure 3: Gameplay Minute – Enemy Bullets courtesy of Zachary Strambaugh

2. The enemies begin firing bullets at the player. Each of the two enemy types fire bullets in differently. Right now, the player and the enemies are in the same realm, so they are able to harm each other.

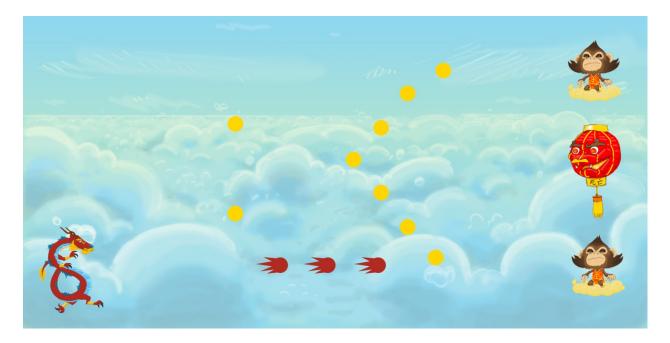


Figure 4: Gameplay Minute – Combat courtesy of Zachary Strambaugh

3. The enemy bullets begin to move across the screen. The player has moved and is now firing back at the enemies.

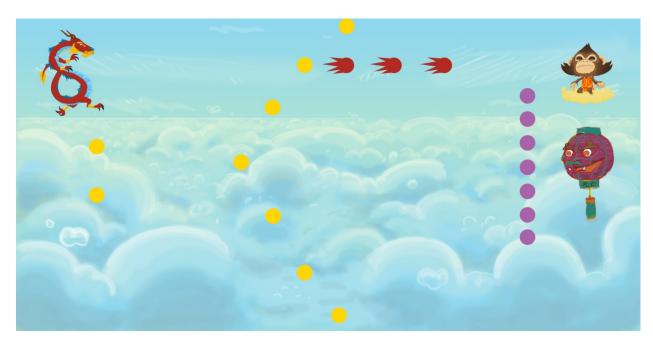


Figure 5: Gameplay Minute – Enemies Shifting Realms courtesy of Zachary Strambaugh

4. The player defeated one of the enemies and is now engaging another enemy. One of the enemies has changed to the other realm as shown by its change in color and the color of the bullets it fires.



Figure 6: Gameplay Minute - Player Shifting Realms courtesy of Zachary Strambaugh

5. The other remaining enemy has also changed realms and the bullets the player previously shot no longer affect it. The player has now changed realms too in order to continue engaging the enemy. The Dragon King has changed color to indicate he changed realms and the bullets he fires are a different color too.



Figure 7: Gameplay Minute – Finishing Off Enemies courtesy of Zachary Strambaugh

6. The player has defeated another enemy and only one more remains for them to engage. The player and the enemy are in the same realm because they have the same color scheme.



Figure 8: Gameplay Minute – Defeating Enemies and New Enemies courtesy of Zachary Strambaugh

7. The player has defeated the last enemy and it dropped a pick-up upon defeat. The player moves to acquire the pick-up as new enemies being to spawn and attack the player. The process of enemy spawns, combat, and enemy defeat repeats until the player experiences an especially difficult fight at the end of a level and then the level ends.

#### Story/Backstory

The Dragon King guards the East Sea, holding it up with his palace. Extending down to the depths of the East Sea is a staff upon which his kingdom sits. The Monkey King, Sun Wukong, has shed the magical band around his head that allows the gods to keep him under their control. In his mischief, he has stolen the Staff of the East Sea to get back at the gods. The Dragon King now hunts the Monkey King in an effort to retrieve the staff, before the sea drifts into oblivion and the world falls apart.

#### **The Dragon King**

The Dragon King guards the East Sea as he has done since the beginning of time. He obtained a magical rod, which could change in size and he used it for measuring the seas' depths. The Dragon King grew the staff to an immense size and built his palace upon it to hold the East Sea in place. Now the Dragon King hunts the Monkey King in an effort to retrieve the staff and return balance to the world.

#### The Monkey King

The Monkey King Sun Wukong came from chaos and mischief. He possesses an immense amount of strength, the ability to change shape, and the power to copy himself from his plucked hairs. The gods kept the Monkey King under their control for ages with a magical ring placed around his head that would shrink when they wished to punish him for his mischief. The Monkey King tricked the gods and shed his ring, stealing the Staff of the East Sea when he fled. He has since been using the staff to cause chaos across the world with his minions.

## **Gameplay**

## **Core Gameplay Mechanics**

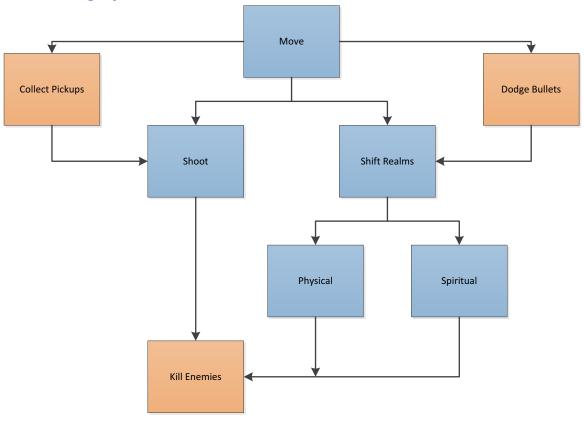


Figure 9: Core Gameplay Mechanics Flowchart

## **Player's Objective**

### **Primary Objectives**

• Defeat the Monkey King and retrieve the stolen staff

### **Secondary Objectives**

- Defeat enemies to advance
- Absorb bullets to get points
- Collect pickups to become more powerful and gain more points

#### Main Character: The Dragon King

The Dragon King (also known as Au Guang) is a large dragon serpent and is a god with many powerful abilities. His full title is The Dragon King of the East Sea and he reigns over his dominion from an underwater palace. Though he has brought chaos upon mortals in the form of fierce storms and droughts, he also keeps the East Sea in balance and takes his job seriously. His main goal is to retrieve The Rod from the Monkey King and restore peace to the East Sea.

The Dragon King is able to fly freely through the air and demonstrates his wrath against the Monkey King and his minions in the form of 5 abilities:

- 1. **Shifting Realms:** The ability to shift between the physical realm and the spiritual realm at will. The Dragon King changes colors when shifting realms, as do the color of his attacks.
- 2. **Bullets:** The Dragon King's standard attack, which fire in a straight horizontal line and do 1 HP of damage per hit.
- 3. Chi Burst: A beam attack that fires in a straight and continuous horizontal line.
- 4. **Spread-Shot:** A huge burst of bullets in a wide vertical pattern that moves across the screen.
- 5. **Thunder Storm:** A fierce storm that attacks all enemies on screen that are in the same realm as the Dragon King.

The Player Movement/Interactions and Pick-Ups System sections of this document cover the Dragon King's abilities in full detail.

#### **Dragon King Concept**



Figure 10: A concept of the Dragon King, as he appears in the physical and spiritual realms; Courtesy of Zachary Strambaugh

## **Player Movement/Interactions**

	Movement		
The game space takes place on one screen. The player is always on-screen and there is only the illusion			
of the player scrolling from left to right via the scrolling background. The player flies in the air so they			
can move anywhere within the bounds of the screen by going up, down, left, or right.			
Interactions			
Combat	The player interacts with enemies by engaging them in combat. Combat involves the player and enemies firing bullets and other projectiles at each other. The game determines whether the player can interact with a certain enemy based on what realm both of them are in. When the Dragon King and an enemy are in the same realm, they can harm each other. When they are in opposite realms, they are no threat to each other.		
	If a single harmful bullet hits the Dragon King, he loses a life. Once all of his lives are gone, the player must start the level over from the beginning. The Dragon King will also lose a life if he physically touches an enemy in the same realm as him. The Dragon King cannot touch an enemy in the opposite realm as him; he will simply pass over them.		
	The rules of realms also apply to bullets. Once the player or an enemy fires a bullet, that bullet remains in whichever realm the player or enemy fired it in. For example, if the Dragon King fires a bullet while in the Physical Realm, that bullet will move across the screen and remain in the Physical Realm even if the player changes realms.		
	If the player makes contact with bullets that are of the opposite realm that they are currently in, then they will absorb those bullets instead of them killing the player.  Absorbing bullets adds to the player's score and gets rid of potential threats if the player wants to shift realms.		
Environment	There are no environmental objects in the game, only enemies, bullets, and pick-ups.  Everything else is open space for the player to navigate. The environment is the entire screen and the player cannot leave the bounds of the screen, but can move anywhere within it.		
Inventory	The player is able to acquire 4 different pick-ups in the game. These pick-ups are Chi Burst, Spread Shot, Thunder Storm, and Talisman. The first three are power-ups that give the Dragon King different ways to attack his enemies and the last one is a shield that gives the Dragon King protection from a single bullet attack. The Dragon King can acquire any of the 4 pick-ups by simply touching it as it floats across the screen. Details of how pick-ups work are in the Pickups System section of this document.		
Skills	N/A		
Abilities	The Dragon King has various abilities, most of which are associated with different pickups he can acquire in the game. His pick-up related abilities are the Chi Burst, Spread Shot, Thunder Storm, and Talisman. The two abilities that are not pick-up related are his basic bullet attack and the ability to shift realms. The Talisman ability is the only ability that happens automatically once the player grabs the pick-up for it. The other abilities require the player to press a keyboard key to activate it.		

Figure 11: Player Movement and Interactions Table

## Weapons

There are no weapons in Revenge of the Dragon King.

## **Enemy/Secondary Characters**

#### **Cloud Monkeys**

The Cloud Monkeys are the basic enemy the player encounters and are the easier of the Monkey King's two minions. They are standard monkey soldiers that float on clouds to hover in the air. Their main goal is to prevent the Dragon King from seeking the Monkey King by blasting him out of the sky.

#### **Cloud Monkey Concept**



Figure 12: Cloud Monkey Concept courtesy of Zachary Strambaugh

#### **Death Lanterns**

The Death Lanterns are the advanced enemy the player encounters and are the harder of the Monkey King's two minions. They are enchanted Chinese Lanterns with the face of a lion and hover in midair. Their main goal is to prevent the Dragon King from seeking the Monkey King by blasting him out of the sky.

#### **Death Lantern Concept**



Figure 13: Death Lantern Concept courtesy of Zachary Strambaugh

#### **The Monkey King**

The Monkey King (also known as Sun Wukong) is a mischievous monkey god and the main villain of the game. He serves as the game's only boss and possesses god-like strength as well as a cloud, which he uses to fly through the air. The Monkey king has minions at his disposal to distract the Dragon King as he makes his escape with The Rod. He sought out The Rod in order to own a weapon that complimented his skill and strength. His main goal is to fight off the Dragon King so that he can keep The Rod for himself.

#### Monkey King Concept



Figure 14: Monkey King Holding the Rod courtesy of Zachary Strambaugh

## **Enemy Movement/Interactions**

Cloud Monkey			
Movement			
Cloud Monkeys	Cloud Monkeys never move. Once they spawn on the screen, they remain where they spawned until the		
player defeats	them.		
	Interactions		
Combat	Cloud Monkeys have 1 HP and give the player 50 points when defeated. They spawn at		
	the far right of the screen and stationary in the place they spawned as they attack the		
	player. They also shift between the physical realm and the spiritual realm at will just like		
	the Dragon King. This means their appearance and bullets change color depending on		
	the realm they occupy. Cloud Monkeys will randomly shift realms every 1-5 seconds.		
	Finally, they fire single bullets in a straight line toward the player's current position.		
Environment	Cloud Monkeys remain on-screen at all times and only interact with the Dragon King		
	depending on what realm they and the Dragon King both occupy. If they are in the same		
	realm and the Dragon King touches them, the Dragon King will lose a life. Otherwise, the		
	Dragon king will simply pass over Cloud Monkeys unharmed.		
Inventory	Cloud Monkeys can drop pick-ups upon defeat, but they cannot interact with them in		
	anyway.		
Skills	N/A		
Abilities	See 'Combat' section of this table.		

Figure 15: Cloud Monkey Movements and Interactions

Death Lantern			
Movement			
Death Lanterns	Death Lanterns never move. Once they spawn on the screen, they remain where they spawned until the		
player defeats	them.		
	Interactions		
Combat	Death Lanterns have 10 HP and give the player 300 points when defeated. They spawn at the far right of the screen and stay stationary in the place they spawned as they attack the player. They also shift between the physical realm and the spiritual realm at will just like the Dragon King. This means their appearance and bullets change color depending on the realm they occupy. Death Lanterns will randomly shift realms every 1-4 seconds. Finally, they fire 7 bullets in an arched-spreading pattern straight ahead toward the left of the screen.		
Environment	Death Lanterns remain on-screen at all times and only interact with the Dragon King depending on what realm they and the Dragon King both occupy. If they are in the same realm and the Dragon King touches them, the Dragon King will lose a life. Otherwise, the Dragon king will simply pass over Death Lanterns unharmed.		
Inventory	Death Lanterns can drop pick-ups upon defeat, but they cannot interact with them in anyway.		
Skills	N/A		
Abilities	See 'Combat' section of this table.		

**Figure 16: Death Lantern Movements and Interactions** 

	Monkey King		
	Movement		
	The Monkey King never moves. Once he spawns on the screen, he remains where he spawned until the player defeats him.		
	Interactions		
Combat	The Monkey King has 100 HP and gives the player 2,500 points when defeated. The Monkey King stays in one place at the middle of the far right of the screen. He is able to shift between realms just like his minions and the Dragon King. This means his appearance and bullets change color depending on the realm he occupies. The Monkey King will randomly shift realms every 1-3 seconds. The Monkey King has both of the attacks of his two minions.  1. Fires single bullets in a straight line toward the player's current position. 2. Fires 7 bullets in an arched-spreading pattern straight ahead toward the left of the screen.		
Environment	The Monkey King remains on-screen at all times and only interacts with the Dragon King depending on what realm they both occupy. If they are in the same realm and the Dragon King touches him, the Dragon King will lose a life. Otherwise, the Dragon king will simply pass over the Monkey king unharmed.		
Inventory	The Monkey King drops The Rod upon defeat, which the Dragon King acquires to end the game.		
Skills	N/A		
Abilities	See 'Combat' section of this table.		

Figure 17: Monkey King Movements and Interactions

## **Skills System**

There is no skills system in *Revenge of the Dragon King*.

## **Objects System**

There are no objects in Revenge of the Dragon King.

### **Pick-ups System**

#### The Spread-Shot

The Spread-Shot pick-up is a power-up that changes the Dragon King's type of shot. The Spread-Shot displays as a burst of bullets in a cone pattern that moves across the screen. Each bullet in the Spread-Shot behaves exactly as any normal bullet would. The Spread-Shot affects only enemies existing in the same realm as it. The advantage of the Spread-Shot comes from its large range of attack. It is effective at talking out a large number of weak enemies at once. The disadvantage is that after each shot there is a delay of 0.5 seconds before you can shoot again.



Figure 18: Spread-Shot Icon courtesy of Zachary Strambaugh

#### The Chi Burst

The Chi Burst pick-up is a power-up that changes the Dragon King's shot. The Chi Burst is a beam attack that fires in a straight and continuous horizontal line. It deals continuous damage over time for as long as it is colliding with an enemy. Specifically, the Chi Burst deals 1 HP of damage every 0.5 seconds. The Chi Burst only hits enemies in the same realm as it. The Chi Burst is very effective at attacking enemies with a lot of HP. The disadvantage is that the player moves in a slower rate when firing the Chi Burst.



Figure 19: Chi Burst Icon courtesy of Zachary Strambaugh

#### **Thunder Storm**

Thunder Storm is a fierce storm that attacks all enemies on the same realm as the Dragon King. More specifically, Thunder Storm deals 5 HP of damage to all enemies on the screen. It is the Dragon King's strongest ability and the player should use it as a final attempt to get out of a desperate situation.

Thunder Storm is a power-up and the player must acquire a Thunder Storm pick-up in order to use the ability. For every Thunder Storm pick-up the player acquires, The Thunder Storm Counter in the top left of the screen increases by one. When the player uses a Thunder Storm, the counter decreases by one. If the counter is zero, then the player cannot use Thunder Storm. The player begins a level with the Thunder Storm Counter set at 2. Finally, the Thunder Storm Counter has a maximum of 5.



Figure 20: Thunder Storm Icon courtesy of Zachary Strambaugh

#### **Talismans**

A Talisman is a pick-up that gives the player protection from a single bullet hit (i.e. The Player does not instantly lose a life such as he or she normally would). Once a Talisman absorbs a bullet hit, it disappears and the Dragon King becomes defenseless, as he normally would be. If the player acquires a Talisman when they already have one, their protection does not increase, but they do get an increased number of points. When the Dragon King picks up a Talisman, a transparent green shield appears around him.



Figure 21: Talisman Icon courtesy of Zachary Strambaugh

#### **Health System/Checkpoint System**

The Dragon King takes damage when he collides with an enemy or with the projectiles they shoot. It takes one damage to kill him, unless the player had collected a "Talisman of Protection" granting the Dragon King one extra health point. Whenever the Dragon King dies, one life is lost and he respawns in the center back of the screen. Once all lives are lost, the game ends. Enemies can only damage the player is if they are on the same realm as the Dragon King. Otherwise, the Dragon King absorbes the projectiles and increases the score by 10 points per bullet.

The player gets points by killing enemies and completing each combat section in a specific amount of time displayed in the HUD. The amount of points the player gets depends on how fast he killed all the enemies in that section. Scoring 100,000 points grants the player one extra life.

Enemies	Health Points	Points
Cloud Monkey	1	50
Death Lantern	10	300
Monkey King	100	25000

Figure 22: Enemies/Health Points/Score Points

Section	Time
Level 1 – Section 1	15 seconds
Level 1 – Section 2	25 seconds
Level 1 – Section 3	15 seconds
Level 1 – Section 4	30 seconds
Level 1 – Section 5	15 seconds
Level 1 – Section 6	35 seconds
Level 1 – Section 7	50 seconds
Level 1 – Section 8	45 seconds
Level 2 – Section 1	40 seconds
Level 2 – Section 2	50 seconds
Level 2 – Section 3	1 minute and 10 seconds
Level 2 – Section 4	40 seconds
Level 2 – Section 5	50 seconds
Level 2 – Section 6	1 minute and 20 seconds
Level 2 – Section 7	1 minute
Level 2 – Section 8	1 minute and 20 seconds

Figure 23: Pre-defined Times to Complete the Sections in Order to Get Bonus Points

## **HUD/Camera**



Figure 24: Overview of the HUD courtesy of Zachary Strambaugh

#### Lives



Figure 25: Lives courtesy of Zachary Strambaugh

This feature measures the amount of lives the player has left. A simple image of the Dragon King's head next to a number shows how many lives the player currently has. Each time he loses one live, the counter goes down until it reaches zero and the game ends. Each time the player collects over 100,000 points, the counter goes up by one, indicating he gained an extra life.

Score



Figure 26: Score courtesy of Zachary Strambaugh

The score is a counter that shows how many points the player has, and increases whenever he does one of the following actions:

Action	Points
Killing a Cloud Monkey	50
Killing a Death Lantern	300
Completing a combat section under pre-defined time	*2 the sum of all enemy points in that section
Completing an entire level under pre-defined time	50,000
Picking up power-ups	100
Picking up Talismans	100
Absorbing projectiles from opposite realm	10

Figure 27: Score Table

Time



Figure 28: Time courtesy of Zachary Strambaugh

The timer is a counter that only goes up and determines the amount of extra points the player gets after each combat section and level ending. Whenever the player finishes a section under the pre-defined time, he or she receives a bonus that is equal to two times the sum of all enemies defeated in that section. If he or she finished an entire level under the pre-defined time, he or she receives 50,000 points. The position of the timer is at the top center of the screen.

#### **Thunder Storm**



Figure 29: Thunder Storm courtesy of Zachary Strambaugh

This feature measures the amount of "Thunder Storms" the player has left. A simple icon of a lightning bolt next to a number that shows how many times the player can use that ability. Each time he uses the counter goes down until it reaches zero, and each time the player collects a Thunder Storm pick-up the counter goes up by one, indicating he gained one extra Thunder Storm with a cap of nine.

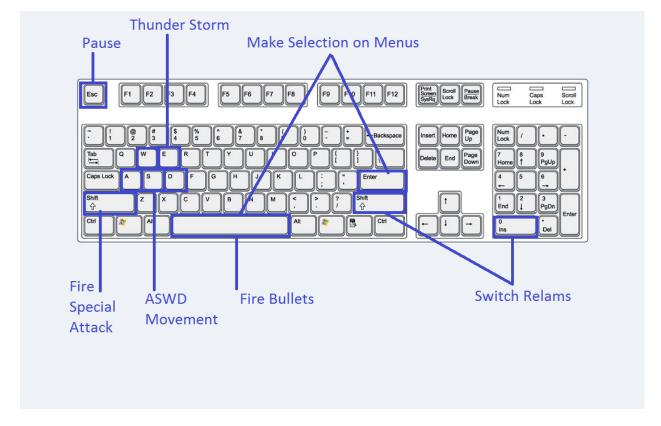
#### **Camera**

The game uses a fixed camera on the screen, not on the player. The background images are tiled and move from the right to the left side of the screen repeating indefinitely until the level ends. There is no actual movement during the gameplay, just the illusion of it.

#### **Controls**

Player Action	Key
Move Up	W
Move Down	S
Move Left	Α
Move Right	D
Fire Bullets	Space
Fire Special Attack	Left Shift
Switch Realms	NumPad 0/Right Shift
Use Thunder Storm	E
Pause	Escape
Navigate Menus	W, A, S, & D or Arrow Keys
Make a Selection on Menus	Enter/Space

Figure 30: Controls



**Figure 31: Keyboard Controls** 

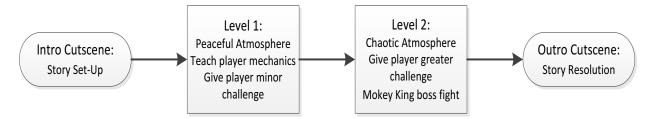
## **World Layout**

#### **Game World Overview**

Revenge of the Dragon King takes place in Ancient China during the time of The Journey to the West, an ancient novel of Chinese mythology and legend. The Monkey King stole the Rod from the Dragon King's undersea palace and escaped into the skies on his cloud. There are two levels in the game. Both take place in the skies above China as the Dragon King pursues the Monkey King to reclaim the Rod and restore balance to his ocean domain.

Level 1's setting is fairly peaceful and calm. The sky in the background is peaceful and filled with clouds.

Level 2's setting is much more chaotic than Level 1's. The ocean turned violent and it churns and thrashes about without the Rod to hold it together. The background is a hectic scene with jets of water shooting into the air with skies overhead.



**Figure 32: Game World Overview Flowchart** 

### **Level Descriptions**

#### Level 1: Open Sky

#### **Quick Summary**

The Dragon King chases after the Monkey King. Before he can reach him, he needs to kill all of his minions in each one of the eight combat sections in order to finish the first level. After the Dragon King kills all of the minions, he progresses to the next level and becomes one-step closer to the Monkey King.

**Environment Concept** 



Figure 33: Open Sky Environment Concept courtesy of Zachary Strambaugh

#### Gameplay Overview

- Learn the basic commands
- Learn how the enemies behave
- Kill all the enemies
- Collect the different pick-ups

#### Overview Map/Key

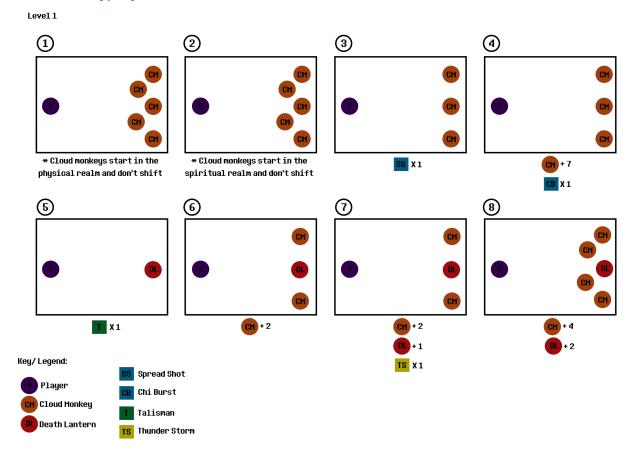


Figure 34: Level 1 Overview Map

#### Walkthrough

#### Gameplay

- 1. In the first combat section, there are 5 Cloud Monkey enemies that start in the physical realm and don't shift.
- 2. In the second combat section, there are 5 Cloud Monkey enemies that start in the spiritual realm and don't shift.
- 3. \*From this moment on all enemies shift between realms\*In the third combat section, there are 3 Cloud Monkey enemies, one random Cloud Monkey drops a Spread Shot pick-up.
- 4. In the fourth combat section, there are 3 starting Cloud Monkeys and 7 more coming as the player kills the ones that are on screen, one random Cloud Monkey drops a Chi Burst pick-up.
- 5. In the fifth combat section, there is 1 Death Lantern enemy, he drops a Talisman pick-up.
- 6. In the sixth combat section, there are 2 starting Cloud Monkeys and 1 starting Death Lantern, 2 more Cloud Monkeys coming as the player kills the ones that are on screen.
- 7. In the seventh combat section, there are 2 starting Cloud Monkeys and 1 starting Death Lantern, 2 more Cloud Monkeys and 1 more Death Lantern coming as the player kills the ones that are on screen, one random enemy drops a Thunder Storm pick-up.

8. In the eighth combat section, there are 2 starting Cloud Monkeys in the front row, 1 Death Lantern and 2 Cloud Monkeys in the back row. 4 more Cloud Monkeys and 2 more Death Lantern coming as the player kills the ones that are on screen.

Dialog N/A

Color Swatch/Palette

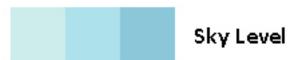


Figure 35: Sky Level Color Swatch/Palette

#### Level 2: Showdown

#### **Quick Summary**

The Dragon King still pursues after the Monkey King. He needs to kill all of the Monkey King's minions in seven of the eight combat sections in order to reach the Monkey King and battle him. The level shows the world breaking apart because the Dragon King can no longer control the oceans without the Rod.

#### **Environment Concept**



Figure 36: Showdown Environment Concept courtesy of Zachary Strambaugh

#### Gameplay Overview

- Use knowledge gained in the previous level
- Greater amount of difficult enemies
- Kill all the enemies
- Collect the different pick-ups
- Kill the Monkey King
- Finish the game

#### Overview Map/Key

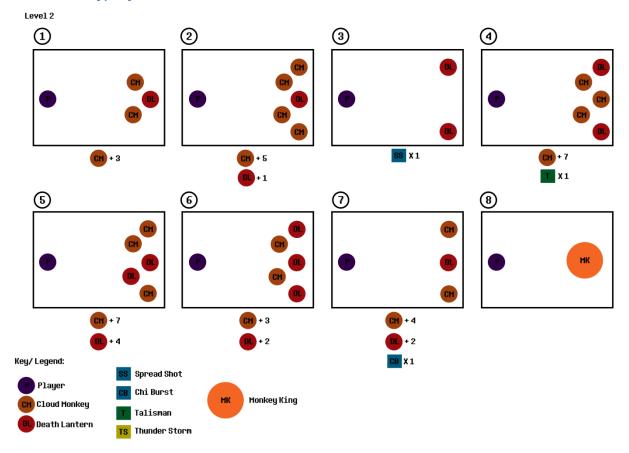


Figure 37: Level 2 Overview Map

#### Walkthrough

#### Gameplay

- 1. In the first combat section there are 2 starting Cloud Monkeys in the front row, and 1 Death Lantern in the back row. 3 more Cloud Monkeys coming as the player kills the ones that are on screen.
- 2. In the second combat section, there are 2 starting Cloud Monkeys starting in the front row, 1 Death Lantern and 2 Cloud Monkeys in the back row. 1 more Death Lantern and 5 more Cloud Monkeys coming as the player kills the ones that are on screen.
- 3. In the third combat section, there are 2 Death Lanterns, one random Death Lantern drops a Spread Shot pick-up.
- 4. In the fourth combat section, there are 2 starting Cloud Monkeys in the front row, 2 Death Lanterns and 1 starting Cloud Monkey in the back row. 7 more Cloud Monkeys coming as the player kills the ones that are on screen. The last enemy of that section drops a Talisman pick-up.
- 5. In the fifth combat section, there are 2 starting Cloud Monkeys and 1 starting Death Lantern in the back row, 1 starting Cloud Monkey and 1 starting Death Lantern in the front row. 7 more

- Cloud Monkeys and 4 more Death Lanterns coming as the player kills the ones that are on screen.
- 6. In the sixth combat section, there are 2 starting Cloud Monkeys in the front row and 3 starting Death Lantern in the back row. 3 more Cloud Monkeys and 2 more Death Lanterns coming as the player kills the ones that are on screen.
- 7. In the seventh combat section, there are 2 starting Cloud Monkeys and 1 starting Death Lantern in the back row. 4 more Cloud Monkeys and 2 more Death Lantern coming as the player kills the ones that are on screen. One random enemy drops a Chi Burst pick-up.
- 8. The eighth combat section is the boss battle against the Monkey King.

Dialog N/A

#### Color Swatch/Palette



Figure 38: Chaotic Level Color Swatch/Palette

## **Menu System**

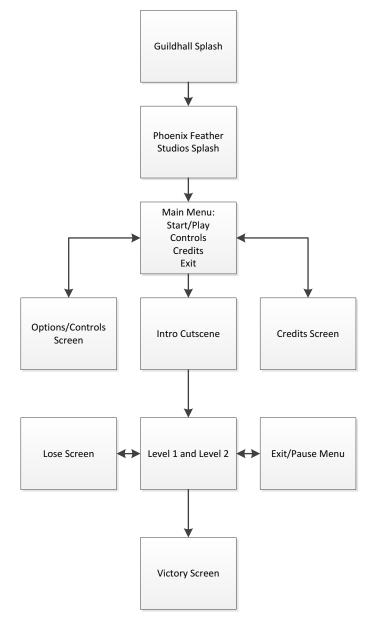


Figure 39: Menu System

#### **Installation**

Extract the zip to a folder location of your choice. Double click the .exe to run.



Figure 40: Install, Desktop, Start Menu, & Short-cut Icon; Courtesy of Zachary Strambaugh



Figure 41: Uninstaller Icon courtesy of Zachary Strambaugh

### **Title Splash Screens**



Figure 42: GuildEd/Guild Hall Splash Screen



Figure 43: Team Splash Screen courtesy of Zachary Strambaugh

#### **Main Menu**



Figure 44: Main Menu Concept courtesy of Zachary Strambaugh

#### **Controls Screen**



Figure 45: Controls Screen courtesy of Zachary Strambaugh

### **Credits Screen**



Figure 46: Credits Screen Concept courtesy of Zachary Strambaugh

## **Exit/Pause Screen**

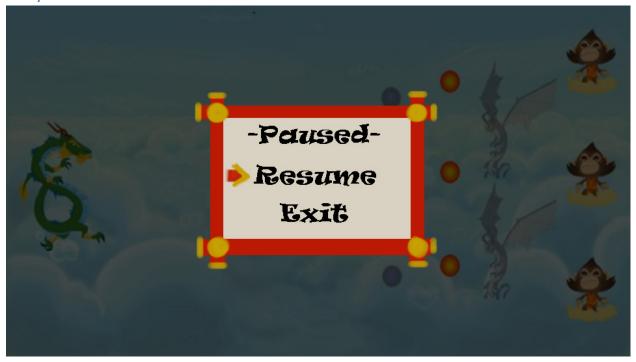


Figure 47: Exit/Pause Screen Concept courtesy of Zachary Strambaugh

#### **Game Over Screens**



Figure 48: Lose Screen Concept courtesy of Zachary Strambaugh



Figure 49: Victory Screen Concept courtesy of Zachary Strambaugh

## Intro/Level-to-Level/Outro Cut-Scenes

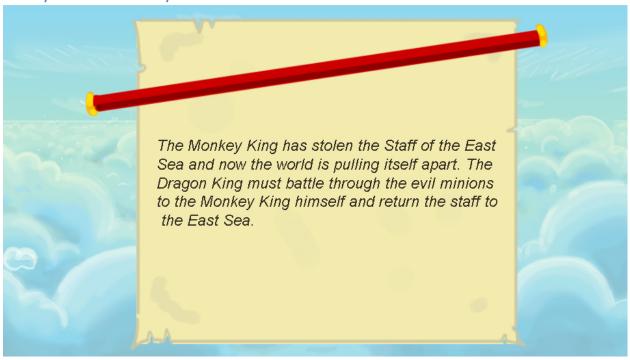


Figure 50: Intro Screen Concept courtesy of Zachary Strambaugh