Dragon Attack

Game design document

GAM150S18

Spring 2018

Team D-Sync

|  |  |  |
| --- | --- | --- |
| **Student Name** | **Official Role** | **Coding Responsibilities** |
| Jacob | Producer |  |
| Javon | Technical Director |  |
| Andrew | Lead Designer |  |
| William | Product Manager |  |

Table of Contents

[**High Concept** 3](#_Toc503910869)

[**Summary** 3](#_Toc503910870)

[**Story (TBD)** 3](#_Toc503910871)

[**Game Flow** 3](#_Toc503910872)

[Title screen 3](#_Toc503910873)

[Main Menu 3](#_Toc503910874)

[Level Selection 3](#_Toc503910875)

[Gameplay 3](#_Toc503910876)

[Scoring 4](#_Toc503910877)

[**Game Mechanics** 4](#_Toc503910878)

[Character Movement 4](#_Toc503910879)

[Choice of Movement Modes 4](#_Toc503910880)

[Win Conditions 4](#_Toc503910881)

[Lose Conditions 4](#_Toc503910882)

[Scoring System 4](#_Toc503910883)

[**Game Characters** 4](#_Toc503910884)

[Player Character 4](#_Toc503910885)

[Merlin 4](#_Toc503910886)

[King Arthur 4](#_Toc503910887)

[**Game Resources** 4](#_Toc503910888)

[Enemies 4](#_Toc503910889)

[Power-ups 4](#_Toc503910890)

[Items 4](#_Toc503910891)

[Bosses(??) 4](#_Toc503910892)

[Platforms 4](#_Toc503910893)

[Hazards/Dangers 4](#_Toc503910894)

[**Game Environment** 4](#_Toc503910895)

[Courtyard / Gatehouse 5](#_Toc503910896)

[Inner Keep / Grand Library 5](#_Toc503910897)

[Dungeon / Throne Room 5](#_Toc503910898)

[**Game Controls** 5](#_Toc503910899)

[Mouse 5](#_Toc503910900)

[Keyboard 5](#_Toc503910901)

[**Visual Design** 5](#_Toc503910902)

[Art style 5](#_Toc503910903)

[Camera Position 5](#_Toc503910904)

[**Audio Design** 5](#_Toc503910905)

[Audio Style 5](#_Toc503910906)

[**Behaviour Design** 5](#_Toc503910907)

[Enemy AI 5](#_Toc503910908)

[Basic Types 5](#_Toc503910909)

[Elite Types 5](#_Toc503910910)

[Special Types 5](#_Toc503910911)

[**Physics Design** 5](#_Toc503910912)

[Physics 5](#_Toc503910913)

[Collision 5](#_Toc503910914)

[**Appendices** 5](#_Toc503910915)

# **High Concept**

Dragon Attack is a 2D single-player action platformer set in a medieval fantasy environment.

# **Summary**

Dragon Attack is a **2D action platformer** where the player plays as a dragon attacking a castle to gain its treasures. The player fights his way through the levels to reach the King and collect coins. The objective of the game is to defeat the King of the castle.

# **Story (TBD)**

A screenshot of a cell phone

Description generated with very high confidenceIn a fantasy realm, a young dragon named Bob has been constantly belittled for his extremely underwhelming name. So, he sets out to conquer the castle of the most famous king of the realm, King Arthur and steal his treasures.

Figure 1 Overall Game Loop

# **Game Flow**

## Title screen

This will include the Digipen Logo and introduce the team name and the game’s title.

## Main Menu

The main menu will include Play, Level Select, Help, Volume and Credits.

## Level Selection <Insert Diagram Here>

The level selection screen will allow players to select from up to 15 levels, with 3 main stages split into 5 sub-stages each.

## Gameplay <Include Diff Curve>

The player has basic fighting skills like Slash and Fire Ball. The plyer will need to use these skills to defeat enemies and bosses. The quantity of enemies will slowly increase and difficulty will gradually increase as well until it hits a difficulty ceiling.

Enemies

Enemies will gradually increase in quantity and variety as the game progresses. Enemies will be coming at the player from the front. However, there will be some who are stationed on platforms above the player. These enemies will shoot arrows at the player. Different enemies require different methods of dealing with them.

Environment

As the player progresses into the game, more platform puzzles will be introduced. These puzzles will have traps like spiked ceilings, wall arrows and ground spears. Players who solves the puzzles will receive a lot of coins or temporary power-ups.

Temporary Power-Ups/Heal

Power-Ups and Healing Items can be found throughout the game. These Power-Ups gives the player improvements like Double Damage, Increased Movement Speed or Increased Defence. Healing items are in the form of Foods laid throughout the map.

Boss Battle

There are Mini-Bosses every mid-stage and a Stage Boss at the end of the stage. The Mini-Boss will have similar skills to their Stage Bosses to prepare the player for the Stage Boss. The Stage Boss will have special skills unique to him, and will have 2 phases. The Stage Boss will test the player’s skill with the mechanics.

## Scoring

At the end of each sub-stage, players will be able to see their total score they’ve gained from the sub-stage. Scores are calculated by the enemies you kill and the coins you collect.

# **Game Mechanics**

## Character Movement

The character can move left, move right, jump, and crouch. The character can also fly for a period of time.

## Choice of Movement Modes

There are two modes of movement. Normally, the character is on the ground and moves as such. In Fly Mode, the character can fly for a period of time.

## Win Conditions

Main Objective – Defeat King Arthur.

Sub Objectives – Collect a certain amount of coins and kill a certain number of enemies to clear a sub-stage.

## Lose Conditions

When Health is zero, the player loses.

## Scoring System

Score is based on coins, treasures and the enemies you defeat. Depending on the player’s remaining health, a multiplier will be applied to the final score.

# **Game Characters**

## Player Character / Bob

Bob is a dragon. Bob’s name is too underwhelming, in terms of dragon culture. He has no treasures to lord over and is constantly being looked down upon by other dragons.

## Merlin

Merlin is the archwizard of King Arthur’s kingdom. He is a few hundred years old and knows a variety of advanced magic.

## King Arthur

King Arthur is the strongest human in the human realm and the King of the castle that Bob attacks. He owns a huge amount of wealth and treasures that he personally guards over.

# **Game Resources**

## Enemies

Soldier – fast moving, light attack , low hp

Knights – slow moving, heavy attacks, can block with shield

Archers – slow moving, long range light attacks, low hp

Cross-bow operators- stationary, long range heavy attack, cross platforms to kill

## Power-ups

## Items

Food – restores health of the dragon when pick up

Coins – Adds to the total score of the player

Treasures – Rarer spawn rates and only accessible by clearing platform puzzles

## Bosses

Stage 1:

Big Dog (One Head) (mini-boss)

Cerberes ( Final boss)

-Bite

-Tackle

-Quick Attack

Stage 2:

Wizard ( mini-boss)

Merlin ( Final-boss)

-Blink

-Energy

-Arrow Rain (Stands on a Platform and Shoots)

Stage 3:

Black Knight ( mini-boss)

King Arthur ( Final – boss)

-Dash (Speed Up)

-Call Allies

-Regeneration

-Pillar of Light

## Platforms

## Hazards/Dangers

# **Game Environment**

Dragon Attack will feature 3 main levels with different themes.

## Courtyard / Gatehouse

## Inner Keep / Grand Library

## Dungeon / Throne Room

# **Game Controls**

## Mouse

Wherever the mouse is pointed at will be where the ranged attack targets.

## Keyboard

The WASD or arrow keys for player movement.

# **Visual Design**

## Art style

Dragon Attack aims to go for a pixel art aesthetic.

## Camera Position

Camera will have a pre-animation zoom and pan out for boss fights.

# **Audio Design**

## Audio Style

# **Behaviour Design**

## Enemy AI

### Basic Types

**Melee**

**Ranged**

### Elite Types

**Melee**

**Ranged**

### Special Types

**Mini-Bosses**

**Bosses**

# **Physics Design**

## Physics

## Collision

# **Appendices**

For any additional aspects of design that do not fit any of the above categories.