

# SUPER PHAGE GAMES



## Armored Donkey Design Specifications

Armored Donkey is currently Unlicensed

Version 0.2 (Pre- $\alpha$ )

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# 1 Design Changelog

- 0.1 (Pre- $\alpha$ ) Decided on physics engine: added plotlines
- 0.2 (Pre- $\alpha$ ) Added Character sprites for alpha characters, added animations to sprites<sup>1</sup>

## 2 Overview

This section gives an impression of the concepts, scope and general feel of the game from a non-mechanical standpoint.

### 2.1 Game Concept

The idea for Armored Donkey arose out of a combination of two factors.

1. A randomly generated video game name: *Armored Donkey: 1942*
2. A strong desire to build a game with the intense atmosphere and simultaneously persistent humor of *Undertale* by Toby Fox, combined with the engaging game mechanics of *Shovel Knight* by Yacht Club Games, and the endearing retro feel of both.

From these the idea for Armored Donkey came to be. Armored Donkey is meant to be a platforming, puzzle-and-combat-based, story-driven, role-playing game.

### 2.2 Feature Set

Armored Donkey will feature a set of interesting and engaging characters to interact with in a variety of ways. It will also incorporate a few different combat

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<sup>1</sup>See the github link under Appendix C: Links for a link to a complete version history of Armored Donkey

mechanisms such as kicking and dodging projectiles, and many puzzle elements such as breakable walls and pullable vines. The game will also have a set of skills and equippable items that scale with progress through the game and player achievement<sup>2</sup>.

## **2.3 Genre**

The primary source of entertainment of Armored Donkey will be the plot and interacting with the characters. The goal is to make the player feel like not only are they effecting real change on the game world, but that they have a say in what these changes are. The game will also have scaling skills and equipment. By these standards, Armored Donkey may be considered a traditional Role Playing Game (RPG). Of course, the game is also 2D and features terrain that requires platforming and puzzle-solving to navigate, and thus may be considered overall to be a platforming RPG.

## **2.4 Target Audience**

The target audience of Armored Donkey is the so-called "90's Kids" generation of gamers who nostalgically remember old PS1, N64, and Original Xbox games, but are still young enough to have not outgrown video games on average.

## **2.5 Game Flow**

The game progresses from the Castle at the beginning through several environments in the Kingdom, including at least one major Town, one smaller Village,

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<sup>2</sup>Further details as the game fleshes out

and one rural area (e.g. forest). The idea is to show the effects of the war on the citizens of the Kingdom across a wealth and status gradient.

## 2.6 Atmosphere

The game should initially feel very silly, not only is this one of Super Phage's original intentions, but it's inescapable in the basic premise of the game. A donkey clad in armor saving princesses is a naturally comical thing. However, the humor will eventually ebb (never disappear) to make room for a stifling sense of widespread poverty and hopelessness.

Not anguish or pain, a dull feeling of the state of affairs being generally terrible that will come to eventually pervade every aspect of life in the Kingdom, and no end in sight. The idea behind the Town, the Village and the forest areas is that first the player meets NPCs with trivial "first-world problems" such as "Good heavens, this war has soldiers tracking mud all through our respectable streets!" By the time the player reaches the rural areas, however, they will encounter homesteads ransacked by hungry soldiers, humble shops pillaged by fleeing barbarians and a populace that is crippled both economically, and emotionally. This will build up at first a fond affection for the game world, then indignation at the forces at work for having reduced such a silly, enjoyable world to such a sorry state, and will provide immense satisfaction in returning the world to the way it ought to be.

The visual style of the game will be limited by Super Phage's currently enlisted artistic talent, but should feature a world that initially looks very neat and deliberate, but decays to a state of derelict reclamation of the space humanity sought to carve out for itself in the world by the nature which mankind once bent to their

will. It will also be very important that the player feel as though important NPCs constantly disregard the value of a mere beast of burden's contribution to bettering society, and only change their minds as they are proven wrong, this should foster a sense of determination in the player to prove that they are worth something, and so are their efforts.

## 2.7 Scope

This subsection details the "scope" of the game in terms of its number of levels/locations, NPC interactions, variety of items and enemies, as well as how puzzles will be used to limit progress until certain objectives have been met.

### 2.7.1 Number of Locations/Levels

As has been (partially) previously mentioned, the game should feature 5 "major" locations that will be joined by, frankly, as many "minor" locations as our available resources will allow<sup>3</sup> These locations will vary in size in the following ways:

- The Castle  
will likely be small enough to fit onscreen all at once, because its primary function is simply for an opening cutscene, and it serves virtually no game-play purpose. It will also have only one exit: the path to the Town.
- The Town  
is intended to be the most vast of the major areas, and could take several minutes to fully explore. The Town will potentially have multiple exits to several minor areas, one of which will lead to the path to the Village.
- The Village  
will be significantly smaller and more humble than the the bustling Town, requiring perhaps only a dozen or so seconds to fully traverse, with one or

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<sup>3</sup>See link to Project Plan in Appendix C: Links for more Resource allocation information.

two exits to minor areas in addition to one exit that is the path to the rural area.

- The rural area  
will, in contrast to the other major areas, be very decentralized, and actually be no more than a combination of many minor areas that feature few-and-far-between, run-down farmsteads or hermit's hovels. The player will navigate this area, passing through a wider variety of minor areas than any other point in the game to eventually reach the Barbarian Camp.
- The Barbarian Camp  
is where the game will end, with the defeat of the Barbarian King, and the resolution of which ending the player has earned. It will feature a clutter of tents somewhat smaller than the Village, and one exit into the Arena where the player faces the Barbarian King.

Furthermore, an important aspect of the game is a variation on the final outcome based on completion of sidequests for various important NPCs throughout the game. These will almost certainly require their own special areas that can only be accessed under the same conditions that constitute a "start" of the associated sidequest.

The natures of the puzzles that keep the player from advancing to each major area have yet to be determined.

### 2.7.2 Variety of Items and Enemies

The hope is to stick with a main group of enemies that receive cosmetic and perhaps mechanical tweaks that reflect the theme of the areas they are found in. For example, a Barbarian Archer in a forested area might wear camouflage, and a Barbarian Archer on a battlefield might wear leather armor. The same concept will be applied to Donkey Armor that is acquired throughout the game (there will be no weapons, armor is all the Armored Donkey needs), with the inclusion of stat boosts, as well as secret armor hidden in puzzle chambers in remote minor areas.



### 2.7.3 Variety of NPCs

NPCs are an important part of Armored Donkey, and will serve as vital plot devices. However, their variety will be limited by (and only limited by) resource constraints<sup>4</sup>.

## 3 Gameplay and Mechanics

As of version 0.2(Pre- $\alpha$ ), much of the mechanics are not fleshed out, so this section is subject to massive change.

### 3.1 Gameplay

What follows is a comprehensive list of features of gameplay in version 0.2 (Pre- $\alpha$ ) of the game, and, to as great a degree as possible without doing the spirit of Armored Donkey a great disservice, attempts have been made to keep it free of speculation and unconfirmed "planned" features as well as stretch goals that Super Phage cannot promise as of March 30, 2016 that it will reach.

#### 3.1.1 Progression

The player will be restricted in moving forward through the major areas by obstacles that require specific skills to bypass, which can only be obtained by completing main objectives. The exact nature of these skills has not yet been determined, but the intention is that these skills be applicable to puzzles and combat beyond the initial obstacle.

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<sup>4</sup>See link to Project Plan in Appendix C: Links for more Resource allocation information.

### 3.1.2 Main Objectives

Beyond an overall objective of rescuing the princess, none of the main objectives of the major areas have been decided upon.

### 3.1.3 Puzzle Structure

One puzzle element, and the first obstacle between major areas, will be the ability to build up speed as the player runs, and ultimately reach a top speed that will damage enemies if the player collides with them, and destroys walls and other structures that have the obvious cracks on them. The name of this skill is currently "Donkey Charge," but this is subject to Puzzles including such objects will often require the player to figure out a way to gain enough speed in a limited, possibly modifiable by other means, space.

## 3.2 Mechanics

This subsection details the game mechanics of version 0.2 (Pre- $\alpha$ ) of *Armored Donkey* with regard to the way objects and the player interact with one another, as well as how the player interacts with the world in terms of skill progression and items.

### 3.2.1 Physics/Movement

Most objects in the world will be affected by gravity, and will elastically collide with one another based on relative mass. This will definitely be a puzzle element (e.g. pushing a block onto a lever or pressure plate) as well as a combat mechanic for

the player, in the case of the "Donkey Charge" skill<sup>5</sup>. It will also be occasionally hilarious, for ragdoll defeated enemies. The inclusion of flying enemies has not been decided upon as of 0.2 (Pre- $\alpha$ ) .

### 3.2.2 Objects/Actions

Objects can be divided into the following categories:

- **Player**  
Player-controlled objects. Currently, the only object planned to belong to this category is the Donkey.
- **Walls and Floors**  
Objects that serve only to arrest motion of other objects.
- **Background**  
Objects that do not interact physically with any other object, and are only meant to add to the atmosphere of the game. Some Backgrounds may become other types of objects when certain conditions are met.
- **Entity**  
Objects that interact physically with Wall objects, Player objects, and other Entities. All NPCs and pushable objects, and likely all projectiles, will be of this class of object.

The most common actions will be elastic collisions between Entities, Players and Walls. Some of these will also be Damaging actions that remove 'hp' from applicable objects. Further actions include the initialization of dialog with NPCs by the player via the Action Button<sup>6</sup> as well as very likely some other important objects.

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<sup>5</sup>See Section 3.1.3

<sup>6</sup>See Subsection 5.2

### 3.2.3 Economy/Strength and Skill Progression

Due to the nature of the areas (blocked until main objectives are completed) it is very easy to limit the player's combat power by controlling the purchasable and hidden armor. As the player defeats enemies, they will level up and be able to choose certain skills to add damage to, or other attributes to increase, giving the player an incentive to engage in combat.

## 3.3 Screen Flow

Areas will be laid out as though dividing a massive rectangular world into sections. For example: traveling to the left edge of an area will take the player to another area based on these divisions. Within an area, the camera will move around centered on the player, never overscanning the aforementioned divisions.

# 4 Plot and Characters

Below is an explanation of *Armored Donkey's* plot, as well as an exhaustive list of characters, and eventually their respective stats, sprites and object classes. (these are not ready as of 0.2 (Pre- $\alpha$ ) ).

## 4.1 Story

The story is still very much under development in 0.2 (Pre- $\alpha$ ) , but more is decided upon every day. What follows is a description of each of three different types of plot: backstory, main plot, and side quests.

#### **4.1.1 Backstory**

The backstory of the Kingdom and the Donkey have not yet been decided to any degree worth mentioning.

#### **4.1.2 Main Plotline**

So far, what is definite about the main plotline is this:

In an unnamed kingdom, the king's castle suddenly comes under attack by a barbarian horde that kidnap the princess. All of the king's knights are defeated, and so were the horses they rode, therefore the Legendary Hero must armor and saddle a simple donkey, and ride it into battle. The Hero is immediately cut down by a hail of arrows. Now it is up to the donkey to save the princess. The player makes his or her way into the Town, where he or she is prevented from advancing by a massive log lying across the road. Upon talking to a couple of Barbarians stationed by the log, the player is directed to the Town's Gym. Once there, the player will run on a treadmill (hopefully a minigame) until they gain the ability to Donkey Charge. Then the player will make his or her way through minor areas until happening upon the Village. A gate blocks the exit toward the rural area, attached to a rope that no one is strong enough to pull. The player will then visit the Village's Dentist, who will tell the player of a secret temple he built his practice on top of. The player will fight and puzzle his or her way through the temple to retrieve the sacred Fluoride. Upon using the Fluoride, the player will gain the ability Donkey Bite, and be able to pull the rope and anchor it to a nearby post, thus gaining access to the rural area. In the rural area, the player will learn that the Barbarian encampment is guarded, and only those who know the password are

allowed in. Each of the farmers in the area knows one letter of the passphrase, but nobody knows what order they should be in, so the player must not only talk to each of the farmers, but must also piece together what the password is so that it can be correctly repeated to the gate guards. Once in the encampment, the player may wander as he or she sees fit, but ultimately the storyline will only progress once he or she steps into the Arena to challenge the Barbarian King who has kidnapped the Princess. From there, when the player triumphs, the game ends. Also, there is a possible secret ending if the player has completed all of the game's sidequests, and perhaps met some additional criteria.

#### 4.1.3 Side Quests

Due to concerns about time conflicts, as of 0.2 (Pre- $\alpha$ ) only one sidequest is planned.

- Pop and Fizz

When the player is first walking through the Village, they encounter a group of barbarians harassing the local wizard and his sickly grandson. The barbarians learn that the wizard (Pop) had used his powers to craft a crystal for the boy (Fizz), and had been pouring magical energy into it for the past decade or so, which is intended to make Fizz strong. They steal the crystal and make off with it into the woods. The player is then asked to retrieve it by Fizz, who says he must care for his grandfather who had been wounded by the barbarians. To complete the quest, the player fights and puzzles their way through a side area to confront the barbarians and return the crystal.

## 4.2 Game World

The following is a description of every area in the game. Expect this to become very lengthy as the game develops.

### 4.2.1 Major Areas

The major areas are known at the time of this writing, but their layouts and contents have yet to be determined. They are, in the order they appear in the game, as follows<sup>7</sup>:

- The Castle  
The Castle should look something like 6 in the Appendix, but probably a bit larger.
- The Town  
The Town should look something like 7 in the Appendix, but much less detailed.
- The Village  
The Town should look something like 7 in the Appendix, but much less detailed.
- The rural area  
A farmstead in the rural area might look something like 9 in the Appendix, but with a different perspective.
- The Barbarian Camp

### 4.2.2 Special Minor Areas

Special Minor Areas are minor areas<sup>8</sup>

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<sup>7</sup>See Section 2.6 for more information about the style of these areas, and Section 2.7.1 for a dissection of the difference between major and minor areas.

<sup>8</sup>See Section 2.7.1 for a dissection of the difference between major and minor areas.

that are involved in side quests or contain hidden items. Because level design and side quests are not done as of 0.2 (Pre- $\alpha$ ) , there are none of these areas planned yet.

#### **4.2.3 Regular Minor Areas**

See Section 2.7.1 for a dissection of the difference between major and minor areas. None of this type of area have been planned as of 0.2 (Pre- $\alpha$ ) .

### **4.3 Characters**

Below is a list of characters separated by category, but as of the time of this writing only some Miscellaneous NPCs, the Armored Donkey, and a few Main NPCs are confirmed.

#### **4.3.1 The Armored Donkey**

A donkey. The strong but silent type. The player controls this avatar of justice. The point of the Donkey is that its backstory is unimportant. The Donkey is just an everydonkey, thrust into unusual circumstances, and persevering despite its staggering ordinariness.

#### **4.3.2 Main NPCs**

This section contains a list of all planned Main NPCs. In the future, this will include their stats, sprites, and backstories if applicable, as well as their contribution to the main plotline. None of this is ready yet.



- **The King**  
The King is a fat, selfish, hilariously incompetent, aging man. The only person he cares about besides himself is his daughter, but he is completely oblivious to her own desires for her future, and wishes only for her to marry a suitable prince. We'd be happy for the King to look pretty much exactly like 2 in the Appendix.
- **The Princess**  
A confident, capable leader with an intimate knowledge of what it takes to properly run the Kingdom. Unfortunately, she has always been treated largely as a figurehead. Her father has always wanted nothing more for her than to marry a wealthy prince with a strong chin, but since she was young the Princess would skip her lessons on etiquette and dancing to secretly read books on economic theory, military strategy, foreign policy and the like. The Princess should look something like 3 in the Appendix, but much less detailed.
- **The Legendary Hero**  
He is prophesied to save the kingdom, but dies immediately. Not really a terribly important character, but central to the reason the player makes any decisions at all, so here we are.
- **The Barbarian King**  
In stark contrast to most Barbarians, the Barbarian King, while authoritative, is motivated, caring, and intelligent. While he has no head for state matters, let alone any idea on how to solve the economic crisis the Kingdom has found itself in, he is a natural leader with a strong sense of morality. The Barbarian King could share a sprite with a regular barbarian, but be much larger.

#### 4.3.3 Side Quest NPCs

Side Quest NPCs are, somewhat obviously, NPCs that are involved in some way in side quests.

- **Pop and Fizz**
  - **Pop**  
An elderly wizard who sells charms to support himself and his grandson,

Fizz.

– Fizz

A young infirm, but courageous child.

#### 4.3.4 Miscellaneous NPCs

Miscellaneous are NPCs that exist solely as obstacles, enemies, immersion factors, or comedic relief. Currently a very limited number of these have been named and identified. In the future, this list will include stats, sprites, interaction details, variants and locations. None of this is ready.

- Soldier  
The Kingdoms defenders. They will have large hats. Soldiers should look something like 4 in the Appendix, but a bit more detailed.
- Barbarian  
Main enemies of the game. Will act like complete tools; the running joke is that all of the barbarians are meat-headed dude-bros. Barbarians should look something like 5 in the Appendix, but a lot more detailed.

## 5 Interface

This section details the way in which a player interacts with the game, via controls, menus, settings etc., as well as the form of the interfaces provided to the player.

### 5.1 Visuals

This subsection describes (and eventually will show) the visual representations of how the player interacts with and receives information from the game.

### 5.1.1 Menus/Dialog

This section will describe/show the menus and dialog system appear to the player.

### 5.1.2 HUD

The HUD will definitely display some kind of map, as well as the player's health. It may display other things, but virtually none of this has been decided of yet.

## 5.2 Controls

This section will detail how the player sends commands to the game. At the moment, all we know is that menus will be navigable, and the Donkey can be moved side-to-side, can jump and can interact with objects and NPCs via an "action button". The motion buttons will likely be tied to both 'WASD' and the arrow keys, and jump tied to the space bar, however this is not definite.

## 6 AI

This section details the way the game's NPCs will act. The AI controller can be divided into two main parts; one that's trying to kill the player and one that isn't.

### 6.1 Enemies

The primary trait of enemies is that they will attempt to cause the player to lose hp, likely in a very different way for each different enemy. The way in which they do this has not been decided yet.

## 6.2 Neutrals

Neutral AI will *not* try to remove the player's hp, usually existing as plot elements or simply as immersion or comedic relief. In all likelihood this AI will be able to be divided into three categories:

- Standing  
This AI doesn't move. In fact, that's hardly AI.
- Idling  
This AI wanders aimlessly to and fro within the area according to the physics engine's rules

## 7 Technical Info

Here we will describe any special mechanisms that we need to supplement Game Maker Studio's (GMS) suite of features, as well as any scripts written outside of the basic GMS interface.

## 8 Management

This section describes the organizational structure of the project and the team, as well as quality control methods used to regulate the stability of the game's release.

### 8.1 Schedule

See Appendix C: Links for a link to the schedule.

## 8.2 Version Control

This section will detail the properties of the github repository we will use for version control<sup>9</sup>.

## 8.3 Testing, Supported Platforms, Localization

The only planned supported platform is Windows, and no localization should be necessary. Testing methods have not yet been decided upon, since no actual code was written for version 0.2 (Pre- $\alpha$ ) of *Armored Donkey*, but in future versions issues will be tracked using Trello<sup>10</sup>.

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<sup>9</sup>See Appendix C for a link to the version control repository

<sup>10</sup>See Appendix C for link to issue tracker

## Appendix A Asset List

This appendix contains a list of, and in the case of visual art shows, the assets of *Armored Donkey*.

### A.1 Visual Art

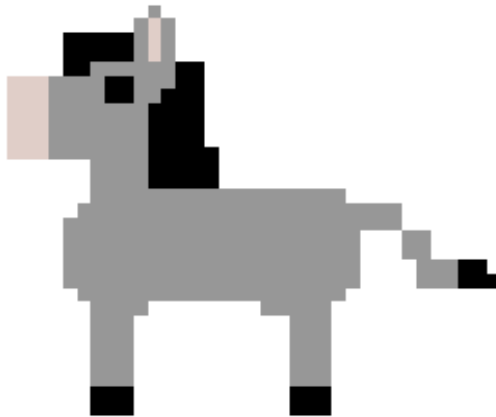


Figure 1: Example Donkey



Figure 2: Example King



Figure 3: Example Princess



Figure 4: Example Soldier

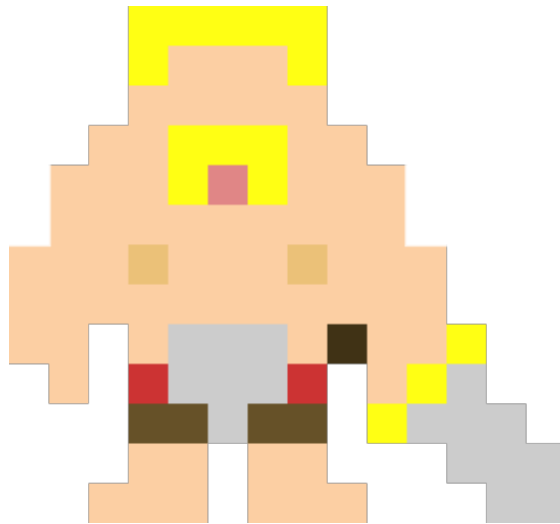


Figure 5: Example Barbarian

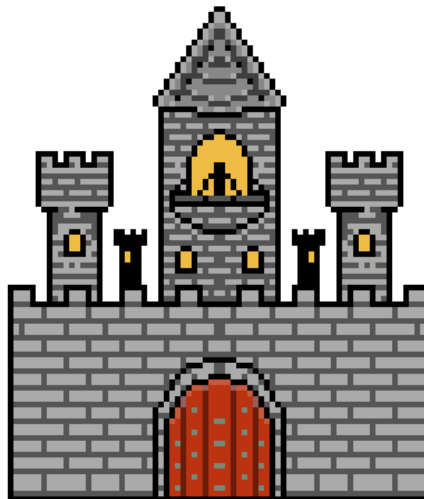


Figure 6: Example castle





Figure 7: Example Town



Figure 8: Example Village



Figure 9: Example Farm

## A.2 Music/Sound

None, yet.

## A.3 Miscellaneous

None, yet.

## Appendix B Development Software

This Appendix lists all software used to create Armored Donkey, their license and version information, and who used them.

### B.1 Primary

As of version 0.2 (Pre- $\alpha$ ) , the only primary software we can confirm using is Game Maker Studio, the information for which is provided below.

- Game Maker Studio  
Purpose: Provides game engine; Used to construct and release game.  
Publisher: YoYo Games Limited  
License: YoYo License; Copyright 2007-2014 YoYo Games Limited. All rights reserved.  
Version: 1.4.1657

### B.2 Member-Specific

Due to division of workload, different software suites are used by different team members to accomplish their tasks. Those are listed according to team member below.

#### B.2.1 Brennan W. Fieck

None, yet.

#### B.2.2 Stephen A. Hamrick

None, yet.

## Appendix C Links

Our Project Calendar (<https://calendar.google.com/calendar/embed?src=ocket8888%40gmail.com>)

Our github (<https://www.github.com/ocket8888/ArmoredDonkey>)

Our Trello issue tracker (<https://trello.com/b/BeXtZTDE/armored-donkey>)

Original Project Plan (<https://www.overleaf.com/4307367dgvbsq>)