Toys 'N Tyrants

Game Design Document

Written by Aardvark Games

Version #2.0

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Table of Contents

Revision History

Version #	Date	Description
1.0	2018.03.01	Initial GDD
2.0	2018.04.26	Final GDD

Game Overview

High Concept

Exploring a toybox dungeon and fighting in high-tension battles against living toys evokes feelings of excitement and whimsy.

Game Summary

The player, as a stuffed animal, weaponizes ragdoll physics against their foes as they explore a world of toys in this chaotic top-down hack-and-slash adventure. The player fights countless enemies ranging from trolls to remote controlled cars all in service of the tyrannical King Threadbear. Play with up to three other players, each wielding their own playful--yet deadly--weapon, adventure together to conquer their enemies and liberate the toybox.

Design Goals

- To create an amusing, yet intuitive, physics-based hack-and-slash combat system
- To form a same screen co-op experience for up to four players
- To encourage replayability through a diverse loot system

Game Features

- Ragdoll centric combat system
- Same screen cooperative gameplay
- A wide variety of weapon and helmet options
- Player character class system

Narrative

The player characters are beloved toys living atop a shelf reserved for only the best and newest toys. A mysterious stranger betrays them casting them into a dark toybox dungeon where they must defeat the spiteful King Threadbear and his henchmen to escape.

Narrative is presented through pop-up dialogue boxes and voiceover during comic-book style cutscenes between levels.
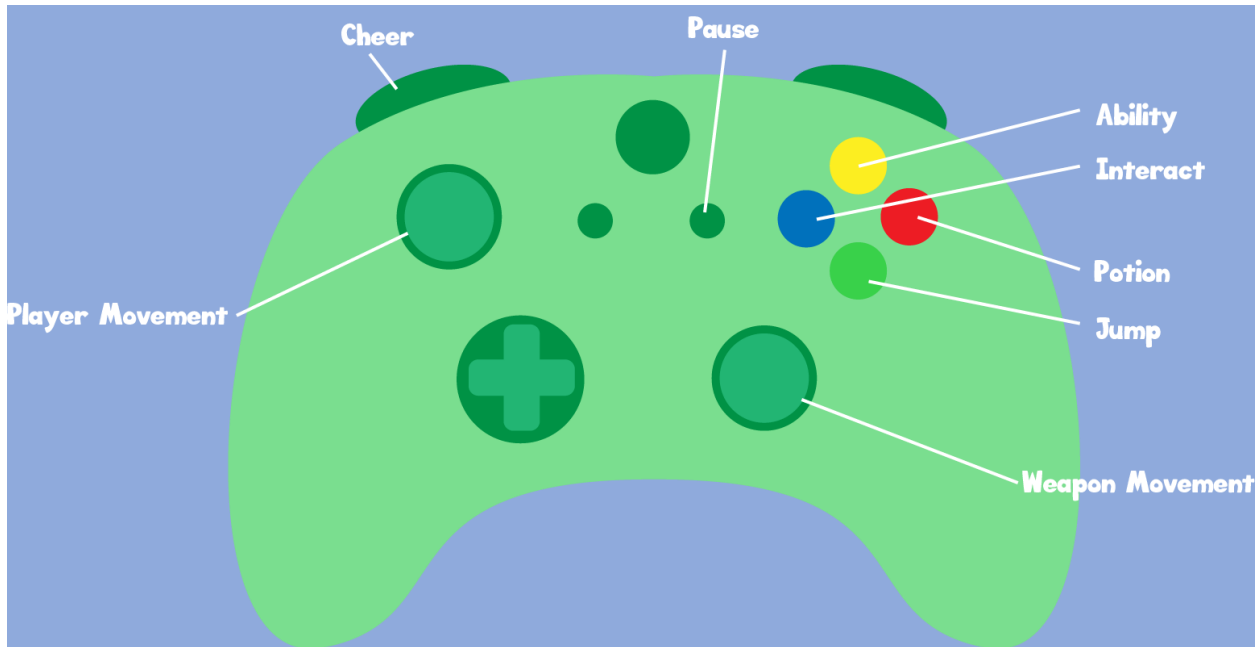
Gameplay

Controls

Image 1- Controls scheme for Toys 'N Tyrants

Metrics

Default player movement speed is 10 Unity units (about 6 meters) per second. The left joystick controls movement in relation to the game camera.

Mechanics

Player Mechanics

Health

Players have a set number of hearts depending on their class. Taking damage results in loss of one or more hearts. All missing hearts are restored using the health potion item. These potions are found in barrels and crates.
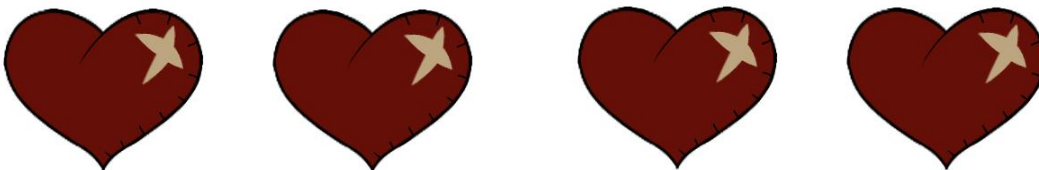

Image 2- Example of hearts for health tracking

Attacks

Players swing their weapon clockwise and counterclockwise within +/- 110 degrees forward and backward from the default position directly ahead of the character's direction.

Multiplayer

Toys 'N Tyrants supports up to four players on screen at once. Players move, fight, and interact independently of one another. 25% more enemies and chests spawn when playing with greater than two players.

Characters

Character	HP	Ability	Cooldown
Healing Hare	4	Heals all nearby allies within 30 units to full HP	30 sec
Brave Bear	5	Spins at 3 rpm for 5 seconds with weapon extended	25 sec
Loyal Lion	6	Taunts causing all enemies within 30 units to move-to and attack her for 5 seconds	10 sec

Items

Players find items on the ground, in barrels, and in chests. Players carry up to one potion. Weapons and helmets can be swapped replacing their current gear but cannot be placed within the inventory.

Weapons

Name	Additional Effects	DMG
Foam Greatsword	Stuns Enemies for 3 seconds.	2
Gobsmacker	Slows Enemies by 50% for 5 seconds.	5
Flame Striker	Applies a burn effect to enemies dealing 2 damage every second for 2 seconds after the initial strike.	2
The Martini	Applies a bleed effect dealing 1 damage every second for 3 seconds after the initial strike.	3

Helmets

Name	Description	Additional Effects
Fire Chief	Fireman's Hat	Increases maximum health by 1
Pinwheel	Propeller Hat	Immune to hazards
Worker's Friend	Construction Hard Hat	Reduces damage taken by 1
Bunny Ears	Costume Bunny Ears	Increases movement speed by 50%
Bucket Helm	Sand Bucket	Increases damage dealt by 1
Wizard Hat	Wizard Hat	Reduces ability cooldown by 50%

Helmets and weapons listed are only those with additional effects, many helmets are simply cosmetic.

Non-Player Characters

Basic Enemies

Name	DMG	Speed	Health	Description
Troll Doll	1	120% Player Speed	3	Small plastic figurine with wild hair
Robot	2	70% Player Speed	7	Blocky, Retro RC Robot
RC Car	3	200% Player Speed	2	Plastic mold sedan
Dust Bunny	3	100% Player Speed	4	Wheezing creature made from dust

King Threadbear – Boss Enemy

The main antagonist of the game is King Threadbear, a worn-out teddy bear that is missing both of his eyes and most of his fur. He uses his servant, Gerald the Herald, to trick the players in an attempt to steal their button eyes and fur. In combat King Threadbear employs multiple attack styles against the players. King Threadbear has 40 health, and deals 1.5 hearts (3 damage) per hit. He first cycles through each melee ability the order they appear.

Slam - His first attack is a standard tracking melee attack. He targets the closest player and follows them at 80% player speed while charging a melee strike for 3 seconds. He strikes the ground in front of him hitting anyone in the nearby area.

Charge - Second, King Threadbear charges the farthest player. After 1.5 seconds he moves in a straight line at their location at 300% player speed. If he misses a player he is staggered for 2 seconds during which time he takes +2 damage from all strikes.

Spin - His spin attack slowly moves towards the player at 50% player speed. He spins at 3 revolutions per second dealing damage and pushing back any players nearby.

Gerald the Herald – Non Combat Enemy

This fantasy figurine NPC progresses the game's narrative. Gerald teaches the player the mechanics of the game during the tutorial stage. At the end of the tutorial, he betrays the players by pushing them into the toybox revealing his allegiance to King Threadbear. This character is cowardly and does not fight the players at any point. After defeating King Threadbear, Gerald helps the players return to the shelf out of fear they may destroy him as they did his king.

Hazards

Hazards (Jacks, thumbtacks) are avoidable environmental objects that damage the player when they walk into them. Jacks deal 1 damage unless otherwise reduced.

Chests are objects players interact with that spawns one randomly selected weapon or helmet when first opened. Purple chests can only drop weapons, Blue chests can only drop helmets.

Breakable Items (Barrels & crates) explode on impact with a plater and have a ten percent chance to spawn a health potion.

Win, Loss, and Progression

Levels - Upon completion of a level, a cutscene plays conveying relevant narrative information before proceeding to the next level.

Game - Upon completion of the last level after the final cutscene credits play, and players are redirected to the main menu. The game content resets with level select fully available.

Loss State - When a player loses all their health in co-op mode, they are unable to control their character and must wait five seconds to respawn at the beginning of the room they were in. If all other players die during this time the level restarts. If a solo player dies they respawn to the beginning of the room they are in.

User Interface and User Experience
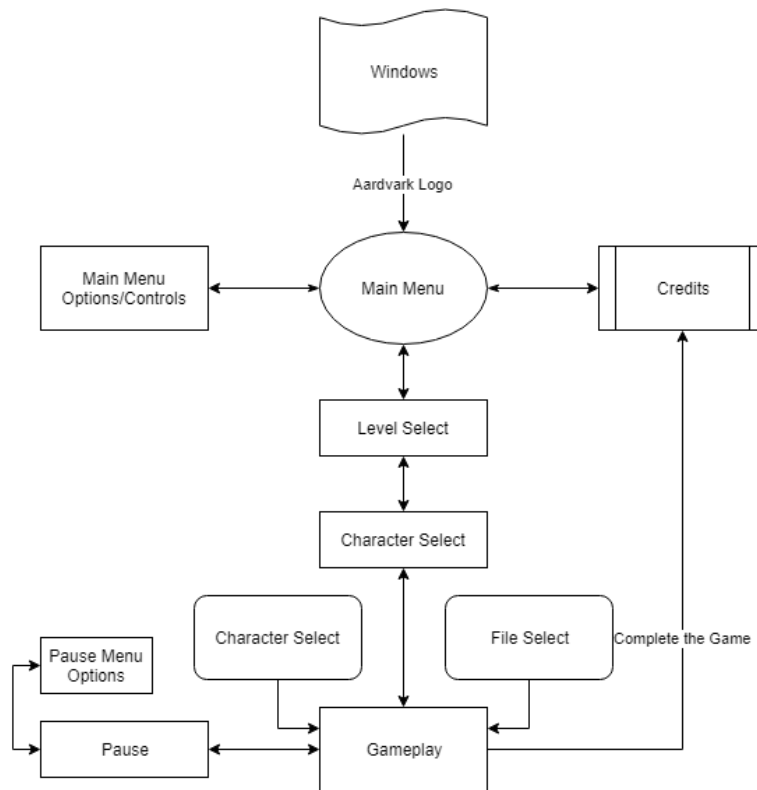
Menu Flow

Image 3- Flow chart depicting Main Menu system

Camera and HUD

Gameplay perspective in *Toys 'N Tyrants* is an angled orthographic top-down view. A reactive camera adjusts zoom and field of view to keep all players on the screen at all times. HUD shows a character portrait, remaining hearts, a potion when available, and a graphic to show when that player's special ability may be used.

Image 4- HUD showing potion, health, portrait, and ability.

Level Overview

   Toys 'N Tyrants levels are linear and contain various areas with chests and breakable barrels with loot. Levels are inspired by child's bedroom furniture, such as a bookshelf, a toy box, and a bed.

Progression Chart

| LV.	Setting	Goal	Introduced Mechanics	Expected Knowledge
0	Self	Learn the story framework, and game mechanics	Control, movement, combat systems	Basic gameplay, elements, conventional mechanic understanding
1	Toy Box	Adventure to King Threadbear's Lair	Robot, Troll Doll, Army Man, and Car	Control scheme, combat system, story context
2	Under the Bed – King's courtyard	Reach the throne room and defeat the king	Dust Bunnies	Class combat dynamics
3	Under the Bed – King's Throneroom	Defeat King Threadbear	King Threadbear (Boss fight)	Full understanding of game mechanics

Level Breakdown
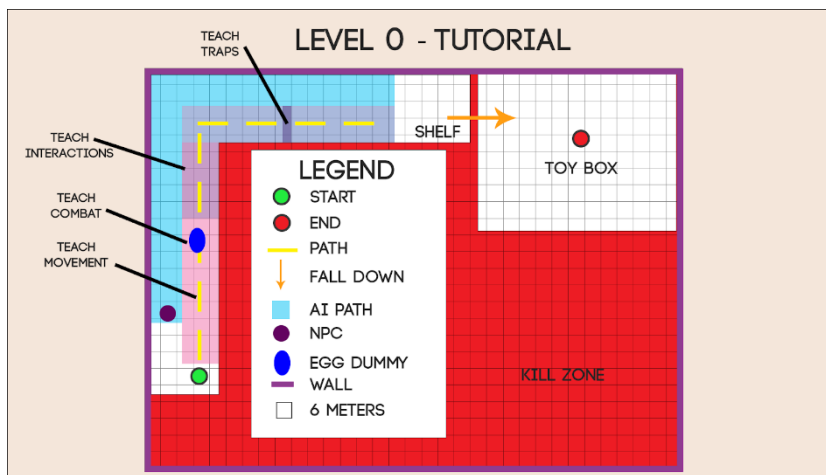
Image 5- Map depicting gameplay elements in tutorial level

Level 0:

Objective: To give the player a small area to experiment with movement, combat, loot, and hazards. The tutorial takes place on the corner of a bookshelf in a child's bedroom. Players follow the path to the end of the bookshelf while learning the basic gameplay mechanics, such as movement, combat, jumping, weapon swapping, and interaction with objects. An NPC delivers instructions for the players to complete the tutorial. At the end of the level, players are betrayed, and pushed off the shelf into the toy box.
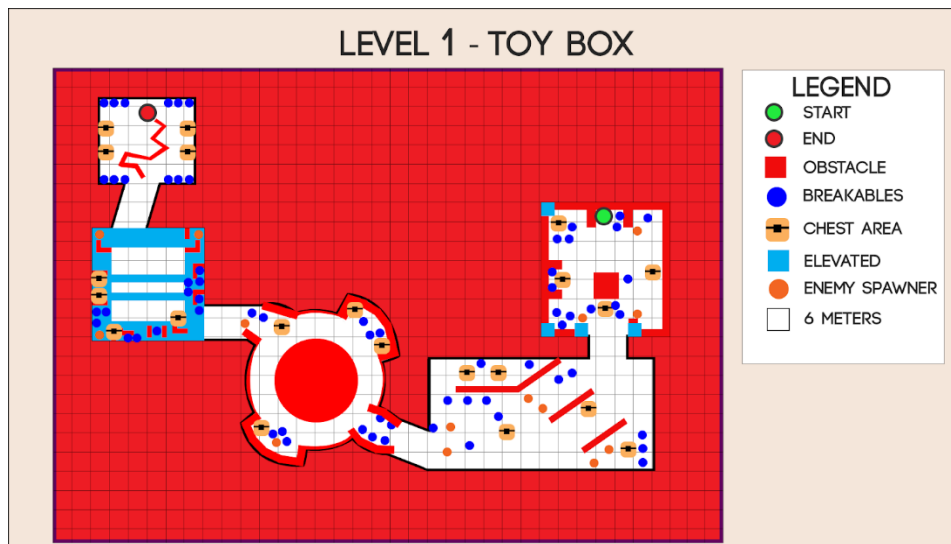
Level 1:

Image 6- Map depicting gameplay progression through level 1

Objective: Escape the Toy box

Level 1 takes place inside the toy box. Players land in the dungeon holding cell within the toy box. Players fight their way through hordes of enemies between them to escape.
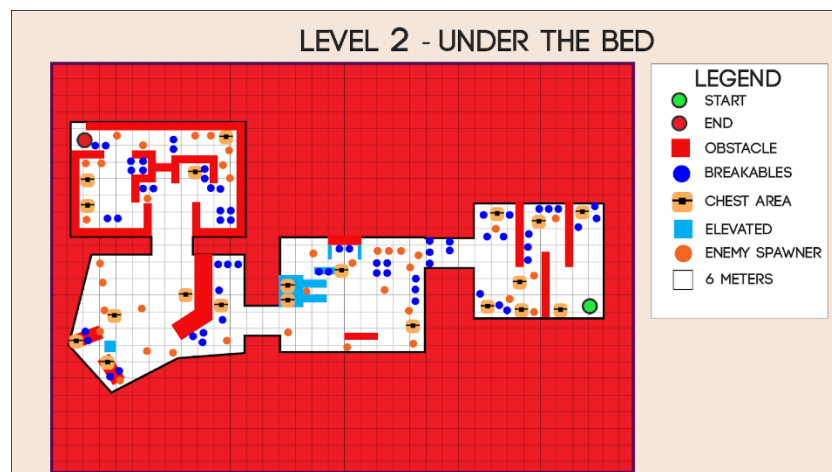
Level 2:

Image 7- Map depicting gameplay progression through level 2

 Objective: Reach King Threadbear's throne room

Level 2 takes place underneath the child's bed. Players start outside the toybox and navigate their way across the messy floor on their way to the throne room. Players fight their way through the enemies protecting the throne room.
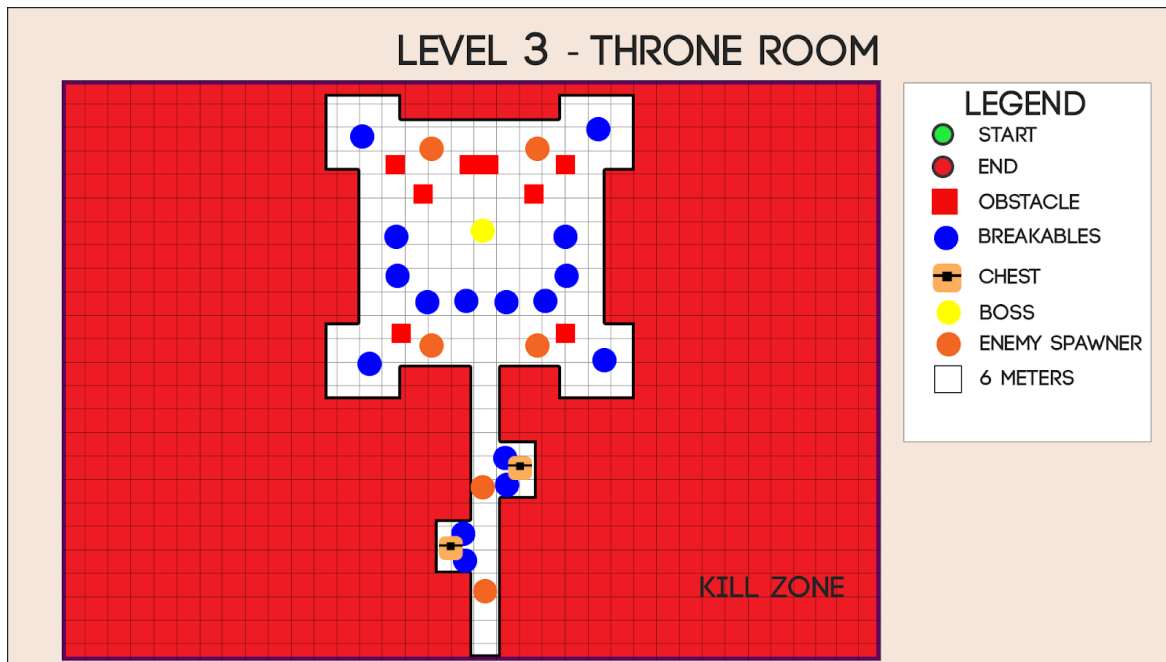
Level 3:

Image 8- Map of arena for the final boss fight against King Threadbear

Objective: Defeat King Threadbear Level 3 takes place underneath the child's bed. Players start in a corridor that leads to the King Threadbear's throne room arena. Along the corridor lines various rooms which contain chests and breakable barrels for loot. Upon reaching the throne room, players defeat the king. After defeating the king, the players will have completed the game.