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| Team 15 |
| Tanks-A-Lot |
| Design Document |

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# Game Design

## Statement

Hop into the pilot’s seat and take control of the most iconic member of your toy-box. Alone, with friends, or against them, take your tank into fun party-style games, challenges, and trials to entertain the masses for as long as physical toys are still fun. So forever.

## Feature List

Tanks-A-Lot is a multi-faceted party game in which players control arcade-style tanks to complete various objectives and challenges. Players can unlock new visuals for their tanks that persist over their entire careers; and improve their class of tank for the missions they’re currently a part of.

### Key Features

* **Arcade-Style Control System –** Highly responsive movement allows players to quickly move across their play space, change their tactics in a snap, and out manoeuvre their enemies with ease. With minimal inputs, there should be no movement or ability too confusing for new players.
* **Wide Variety of Game Types –** With several different maps and modes, each game can be totally unique; playing certain missions alone to improve personal skills, playing with friends to achieve objectives cooperatively, or playing against each other in more standard multiplayer gamemodes.
* **Seamless Multiplayer –** Players will be able to drop in and out of the game with only a few buttons, allowing play to continue for everybody else and not stopping the fun. Any number of players can be involved in any game mode with a single camera that covers the entire playfield; nothing is hidden.

### Additional Features

* **Unique Customisations –** Make your tank yours with a mix and match customisation system, with different turret, body, and tread styles no tank will look the same. With some further customisation available, players tanks will be easily identifiable and fully personalised.
* **Multiple Player Classes –** For a little extra variety, change the abilities of your tank to serve different roles on your team. Heal your friends, increase your armour, or deal more damage; all of these and more can be changed on the fly as you swap your loadouts instantly.

## Overview

### Player Motivation

Motivation for the player will likely change depending on which area of the game they’re currently in, however the overall reason for playing Tanks-A-Lot is simply to have fun, whether it’s alone or with friends.

On a match to match basis, the player will want to continue playing in order to win the game they’re playing at the time. Depending on the current gamemode, this can differ drastically; beating their friends in a competitive scenario, challenging themselves to improve their own skills, or try a new style of play.

Outside of matches, players will be motivated to unlock new options for customisations on their tanks. While a number of these options will be available from the beginning, some further options will be available after certain challenges have been completed, giving more reason to continue playing the game.

### Genre

Tanks-A-Lot is wholeheartedly a party game, with its variety of gamemodes, maps, characters, multiplayer, and friendly atmosphere there’s almost no other way to describe the genre. Due to this, the primary focus of the project is to make fun core gameplay that should be entertaining without all of the bells and whistles attached.

### License

Tanks-A-Lot will have no licensed material. Any characters that appear in the project will either be original creations from the team, or parody of existing characters. The same goes for any of the vehicles to be included; no real vehicles will be included, only original content from the development team or parodies of existing properties.

Environments will also have no reference to existing franchises, brands or other copyrighted material, again, only being original designs or parodies.

### Target Consumer

The target consumer could be anybody, mostly those that enjoy the gameplay, friendly environments, and approachability of games such as the Mario Party series, The Jackbox Party Pack series, the Mario Kart series. This ranges massively from teens, younger children and young adults; due to some of the potentially more complex game types, Tanks-A-Lot likely won’t appeal too much to a full family audience, while some of the more simple modes would still be approachable, they wouldn’t be under the primary target audience.

As a secondary audience, fans of more arena-based games multiplayer will also find enjoyment in some of the more competitive modes included in Tanks-A-Lot. Fans of games such as Fat Princess, the Star Wars Battlefront series, and Rocket League will all find something that appeals to them.

### Competitive Analysis

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | Rocket League (2015) | Mario Party (1998 - 2018) | Overcooked (2016) |
| **Pros** | * Small teams keep games short and intense * Interesting gameplay * High skill ceiling, low skill floor | * Large number of mini-games * Unique characters * Entertaining party-based multiplayer | * Innovative cooperative gameplay * Unique characters and art style * Simple control system |
| **Cons** | * Camera choice makes local multiplayer screen cluttered * (On Release) Only one gamemode could make repetitive gameplay | * Some slow gameplay sections * Random influence can be frustrating | * Disappointing single player experience, relies heavily on multiplayer interaction * Huge spike in difficulty early on |
| **Intended Differences** | * Multiple interesting gamemodes for variation in gameplay * Using a full-coverage camera to reduce player confusion | * Pure gameplay sections will stay fast-paced and engaging * No random influence on gameplay elements | * Single player experience will still be entertaining, but will be best approached with friends * Not exclusively cooperative |

### Unique Selling Point

By approaching Tanks-A-Lot from a gameplay perspective first, we can assure the game is, at its core, fun. With its interesting gamemodes, simple and appealing art style, and the fast-paced interactions, Tanks-A-Lot will focus on keeping players engaged for long periods of time.

**High Intensity Gameplay –** Fast movement, dynamic environments and interactions between players, everything in the gameplay will be turned up to 11.

**Toon-ish Art Style –** Taking inspiration from comics and children’s cartoons, using no graphic content, and utilising an over-the-top style, Tanks-A-Lot can mix its edge-of-your-seat gameplay with an art style that anybody can approach and enjoy.

**Massive Variety of Modes –** A huge number of ways to play, meaning everybody will have something for them. Whether it’s a relaxing night in or an intense competitive session, there will always be a gamemode designed for the party.

### Target Hardware

As a target platform and hardware, any current generation system would be able to cope with Tanks-A-Lot. While a PC would be the least likely option for the game, it would be able to cope with the most intense visuals.

A standard home console, either the Xbox One or PlayStation 4, would absolutely be some of the best choices for the game as they’re likely already used for similar titles and located in a more public setting.

A more party-based console such as the Nintendo Switch would be the best option in the long run, players can take Tanks-A-Lot anywhere and challenge anybody to a short game in any situation.

### Design Goals

**Fun:** The core design that should be remembered always is that the game must be fun. Everything from the gameplay, art design, and even the audio, must give off fun. The game should be able to be enjoyed by almost anybody, at almost any time.

**Simple:** Tanks-A-Lot should be a game that anybody could pick up and start playing with only basic instruction. There shouldn’t be any big tutorial sequences or drawn-out guides for how the player can achieve basic actions. This also applies to the art of the game; nothing should be too complex or difficult to look at and compliment the basic feel of the gameplay.

**Childish:** The player controls a child’s toy tank; nothing should take away from this childish kind of approach to the design. No area of the game is going to be heavy in any way and should always be something a young child could see and enjoy. While keeping to a childish kind of game, we don’t want any kind of crude or rude references or humour.

## Further Details

### Characters

Characters will be limited to parody toys and other customisation areas. These characters can be switched between as a way of identifying between different players tanks.

### Music

Music choices will be centred around higher pitched, simple instruments with a lot of softer sounds. This should provide the player with the sense of simplicity from the rest of the game while contrasting against some of the more intense sounds from the tanks and battle-based gameplay.

### Narrative

Overall, there’s no narrative. While there may be some basic context for some of the more cooperative or solo challenges, the multiplayer aspect of the game means there doesn’t need to be a lot of focus in the narrative areas of the project.

### Art Style

Everything around the art style will be incredibly simplistic. Using basic shapes and a bright colour palette, the childish approach should be the first thing seen by players. For the environment there doesn’t need to be a large amount of detail due to the angle of the camera, the vehicles should have hugely exaggerated features to make different vehicles obvious to players, and to keep in-line with the toy style.

## Feature List

|  |  |  |
| --- | --- | --- |
|  | **Gameplay** |  |
| **Player** |  |  |
| *Movement* | * Instant movement feedback | *Actual rotation of the player doesn’t matter, just force the new direction and catch up the rotation later.*  *Make sure the movement is applying from the centre.* |
| *Attack* | * Basic projectile fire | *Projectile speed MUST be faster than default player speed.*  *Projectiles must be large enough to be noticeable.* |
| *Weapon Rotation* | * Turret snaps to joystick rotation | *Don’t rotate over time, snap instantly to firing direction.* |
| *Drift* | * Retain current velocity * Apply small amount in movement direction | *Keep full speed (can change with testing) on start, apply half (change with testing) speed of another direction if far enough from original direction.* |
| **Power-Ups** |  |  |
| *Health* | * Increase Max Health * Reduce Speed | *Speed reduction can be changed to a different effect.* |
| *Fire Rate* | * Increase Fire Rate * Reduce Damage |  |
| *Speed* | * Increase Speed * Reduce Health |  |
| Damage | * Increase Damage * Reduce Fire Rate |  |
| **Multiplayer** |  |  |
| *Drop In / Drop Out* | * In Lobby; add and remove players on button press |  |
| **Bots** |  |  |
| *Navigation* | * Navigate basic maps |  |
| *Combat* | * Will attack enemies |  |
| *Objectives* | * Is aware of objectives * Will try to complete objectives |  |
| **Customisation** |  |  |
| *Hot Swap* | * Gallery style selection * Tank sections are all separate |  |
| **Top-Down Camera** |  |  |
| *Zoom* | * Max Zoom In * Max Zoom Out * Change Zoom Around Player Positions * Angle Changes Around Zoom Level |  |
|  | **Gamemodes** |  |
| **Solo / Coop** |  |  |
| *Payload* | * Escort payload across map * Attacked by AI enemies * Checkpoint respawns * Game End on all players death / successful escort |  |
| *Horde* | * Survive against AI enemies * Round respawns * Game End on all players death |  |
| **Competitive** |  |  |
| *Deathmatch* | * Free for All * Points for killing other players * Respawn on round end * First player to score limit wins |  |
| *Team Deathmatch* | * Team Based * Points for killing players on opposing teams * Friendly fire is enabled * Respawn on round end * First team to score limit wins |  |
| *Capture the Flag* | * Team Based * Points for capturing enemy flag and returning it to friendly base * Friendly fire is enabled * Respawn after time * First team to score limit wins |  |
| *King of the Hill* | * Free for All * Points for holding ‘The Hill’ uncontested * Respawn after time * First player to score limit wins |  |
| *Payload* | * Team Based * Attacking team must escort payload across the map * Defending team must stop the payload from reaching destination * Friendly fire is enabled * Respawn after time * Game end on time limit or payload reaching destination |  |
| **General Features** |  |  |
| *Respawning* | * Player respawns at a set position for the map |  |
| *Score* | * Track team or player scores |  |
| *Timer* | * Track game time from time limit down |  |
| *Start Sequence* | * Spawn Players (No Control) * Countdown game beginning * Give Control |  |
| *End Sequence* | * Remove Player Control * Show Winner Message * Show Post-Game UI * Return to Lobby |  |

## Asset List

|  |  |  |
| --- | --- | --- |
|  | **Menus / UI** |  |
| **Main Menu** |  |  |
| *Player Drop-In / Drop-Out* | * Add Players * Add Bots |  |
| *Customisation* | * Driver * Turret * Body |  |
| *Options* | * Visual * Audio * Controls |  |
| *Start* | * Move to Pre-Match Screen |  |
| *Quit* | * Exit Game |  |
| **Pre-Match** |  |  |
| *Gamemode* |  |  |
| *Map* |  |  |
| *Match Settings* | * Time Limit * Score Limit |  |
| *Return to Menu* |  |  |
| *Start Match* |  |  |
| **In-Match** |  |  |
| *Pause* | * Resume * Quit * Show Controls * Show Current Scores |  |
| *Countdown* |  |  |
| *Timer* |  |  |
| *Scores* |  |  |
| *Winner Message* |  |  |
| *Post-Match Stats* | * Player Kills * Player Deaths * Player Objective Scores (If Applicable) |  |

# Level Design

## Game Flow

Players begin every level by dropping the tanks in from above the camera view. Once they land, a small countdown of around three seconds begins. Once this countdown is over, the match begins. Players are given control of their tanks and tasked with whatever their objectives are for the match.

As players carry out their objectives, a timer at the top of the screen ticks down towards zero. When the timer has finished counting down, or players have completed their objectives, whichever comes first, the game ends. The winners are announced in a large text message across the screen, to avoid any confusion, and the post-game stats are shown.

This screen allows players to see their performance over the previous game while also letting them take a quick break from the action and prepare themselves for the next match. From here, players can either return to the lobby to select new game settings, or they can replay the exact match they just finished.

## Core Ruleset

Realistically, it should never take a player more than 10-15 seconds to cross a level unhindered. If they come across enemies and it takes longer that’s fine, but to keep the games quick, we want the levels to stay at a relatively medium size.

There shouldn’t be any form of elevation as the tanks themselves don’t have the ability to aim up and down, it also has a chance to break some of the meshes on the tank. We’ll just avoid it entirely.

## Levels

|  |  |  |
| --- | --- | --- |
| **Level Name** | **Available Gamemodes** | **Design Attributes** |
| Harbour | * Deathmatch * Team Deathmatch * Capture the Flag * Last Tank Standing | Using some of the modular blocks, a harbour style environment with a lot of different “buildings” for players to weave in and out of. Should be generally symmetrical for the team based gamemodes without making any areas too easily defended by one player. |
| Sandbox | * King of the Hill * Deathmatch * Last Tank Standing * Horde | A purely free-for-all environment, plus horde, should have a lot of open areas for some wider combat scenarios. Could also have some tighter areas dotted around the level for more intense battles. |
| Block Town | * Team Deathmatch * Capture the Flag | Purely symmetrical for the team based gamemodes. Should have a few alley style pathways to move around the main street the level is set on. Think the main high street going through a small town. |
| Block Town 2 | * Deathmatch * Last Tank Standing * Horde * King of the Hill | A more asymmetrical version of the original Block Town; designed for more free-for-all battles with some open areas alongside the tighter spaces. Similar to the design of Sandbox. |
| Block Town 3 | * Payload (Comp & Coop) | Purely asymmetrical, should utilise choke points for the defensive team but with shortcuts around for the attacking team. Take inspiration from Overwatch payload maps like King’s Row. |
| Garden | * Deathmatch * Team Deathmatch * Capture the Flag * Last Tank Standing * King of the Hill | Should use the same methods as Harbour, a lot of different pathways for players while also trying to force them to confront each other for their objectives. As symmetrical as possible for balance. |
| Garden Extended | * Payload * Horde | Similar to Block Town 3 for the asymmetry, however implement the original Garden map alongside it. Chivalry Medieval Warfare has a few maps that work in this way. |