

Tankeo Drift

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Game Summary

Tankeo drift is an action roguelike game, where you must eliminate oncoming vehicles for as long as possible and upgrade your tank as you play.

- Arcade style vehicle controls with a tank drifting & manual turret shooting
- Progressive upgrade system that allows customization to play-style
- Procedural terrain generation
- Endless mode option
- ~~• Destructible environment~~
- ~~• Bonus multiplier that stacks when killing enemies~~

Target Platform(s)

- This game is intended for Windows and PC
- The game will be played in landscape mode (1920x1080).

Game Overview

Theme / Setting / Genre

Tankeo Drift will be a low-poly arcade style-game. The theme is arcade based with bright/vibrant colors and flashing alerts.

Inspiration

[Vampire Survivor](#): This popular game inspired the main premise for this project, having endless hordes of enemies that the player must defeat. I'd like players to take an active role in my game with attacks being less automated and players focused on attacking / positioning between targets.

[Slayin](#): This mobile game influenced the score multiplier mechanics; I liked the idea of players being rewarded for greed and eliminating enemies as quickly as possible to progress faster. This mechanic encourages a sense of urgency and rewards players for acting upon it. **Removed from final game**

[Survivor.io](#): This mobile game inspired some gameplay and UI elements, as I wanted an art-style that was easy minimalistic to allow lots of scalability.

- **Endless Survival:** Unlike Vampire Survivor, the player will have additional control over their attack choices as opposed to fully automated attacks
- **Score Multiplier:** Multiplier will be influenced by succession eliminations and the players 'drifting' encouraging players to have close encounters with enemies. Influenced by 'Slayin' having players motivated to gain large kill multipliers to earn more currency – **Removed from final game**
- **Score Counter:** Small in-game popups will appear around the player – being a visual component to the score multiplier and adding to this arcade feel
- **Arcade Style Driving:** The player will have an arcade feel to the tank, instead of realistic with the tank being able to accelerate/decelerate quickly and have a drifting feel to the vehicle
- **Tank Upgrades:** The player will have 4 key upgrade paths (Tracks, Demolition, Turret & Armor)

Gameplay

Core Gameplay

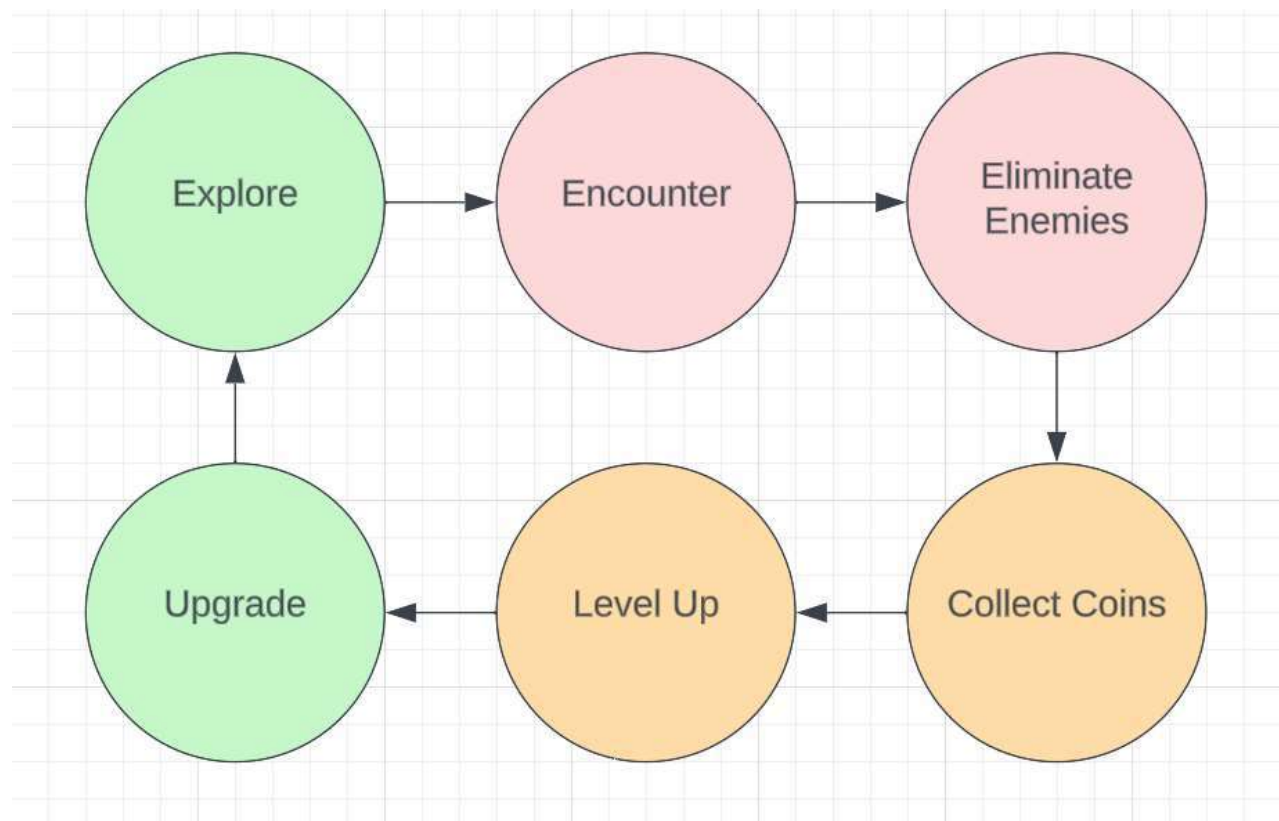
The gameplay loop involves:

The player (tank) exploring the endless terrain, encountering enemies and then eliminating enemies to gain experience (coins). Once the player gains enough experience they level up and can upgrade their tank.

This loops so that the player can survive for as long as possible, by upgrading their gear and overpowering the endless hordes.

To win the game you must survive for 10 minutes after this, on the win screen you will gain the option to enter endless mode.

Flow Chart:



Meta-Games / Gameplay Diagram

Variables or systems that work such as upgrading characters, etc.

Upgrade System:

The character will have arcade driving controls & manual turret firing. As the character collects coins and level's up, they will be able to upgrade their tank.

The tank has 4 upgrade paths (Armor, Speed, Turret, Magnet). Planned briefly in Excel.

Tank Upgrades					
ID	Upgrade Title	Description	Tier 1	Tier 2	Tier 3
1	Armor	Improve base damage reduction	Increase damage resistance	Increase ranged damage resistance	Auto-regenerate armor overtime
2	Tracks	Improve tank tracks quality	Increase tank rotation speed	Increase tank movement speed	Drastically increase tank rotation and movement speed
3	Magnet	Improves item pickup magnet	Increase item pickup range	Increase item pickup strength	Drastically increase pickup range and force
4	Turret	Improve weapon damage / speed / firerate	Increase weapon firerate	Increase turret rotation speed	Increase weapon explosion effect

Example Perk Armor Tier 1

Mechanic Diagram - Upgrades

Upgrade Title	Tier 1
Armor	Increase damage resistance

Character without upgrade



Character with upgrade

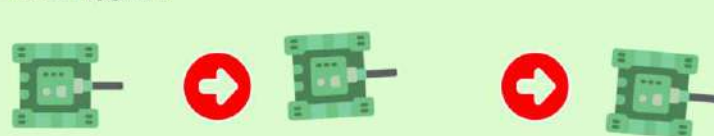


Example Perk Tracks Tier 2

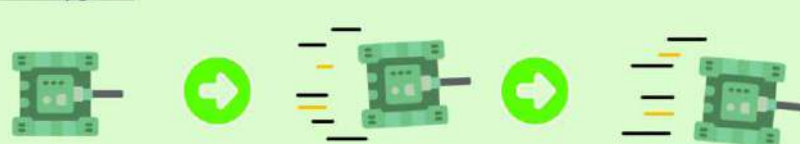
Mechanic Diagram - Upgrades

Upgrade Title	Tier 2
Tracks	Increase tank movement speed

Character without upgrade



Character with upgrade

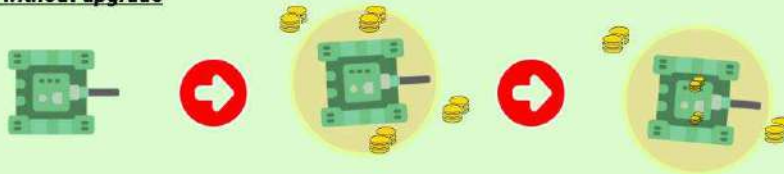


Perk Magnet Tier 3

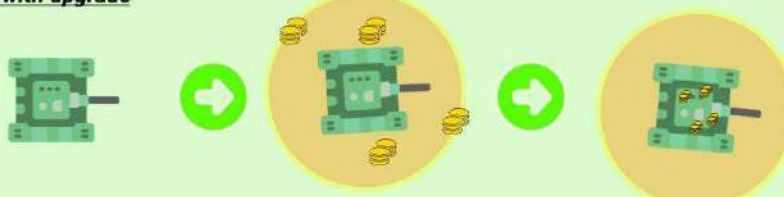
Mechanic Diagram - Upgrades

Upgrade Title	Tier 3
Magnet	Drastically increase pickup range and attraction force

Character without upgrade



Character with upgrade

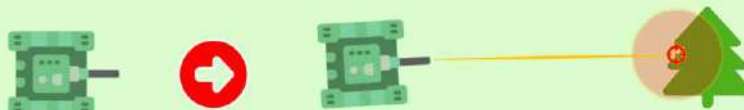


Perk Turret Tier 3

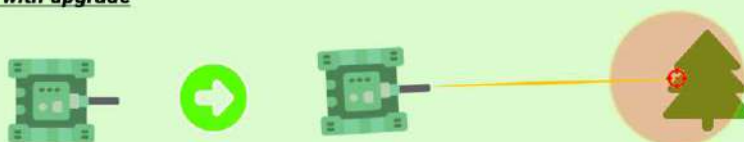
Mechanic Diagram - Upgrades

Upgrade Title	Tier 3
Turret	Increase weapon explosion effect

Character without upgrade



Character with upgrade



Attacks:

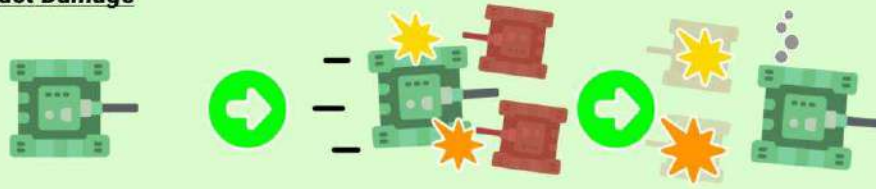
The character will have 2 methods to attack enemies:

Method 1 – Contact Damage

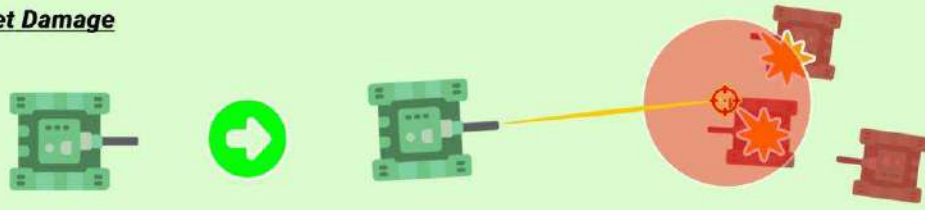
Method 2 – Primary Turret Firing

Mechanic Diagram - Attacks

Tank Contact Damage



Tank Turret Damage



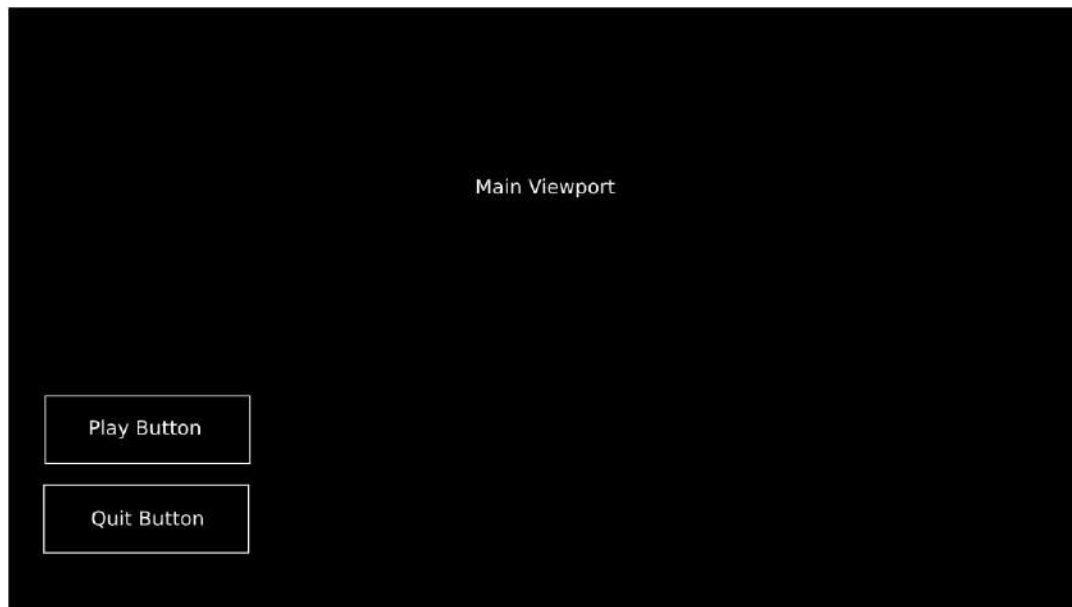
User Interface / Screens

Wireframes of **every** screen or popup in the game and clear info on how they connect and lead to each other.

Main Menu

- Game Logo
- “Play Now” Button -> Goes to 2. Level Selection Screen -> Level Selected Goes to 3. Loads gameplay level of choice
- “Quit” Button -> Exits Game

Iteration 1:



Gameplay Screen

Iteration 1:



Iteration 2:

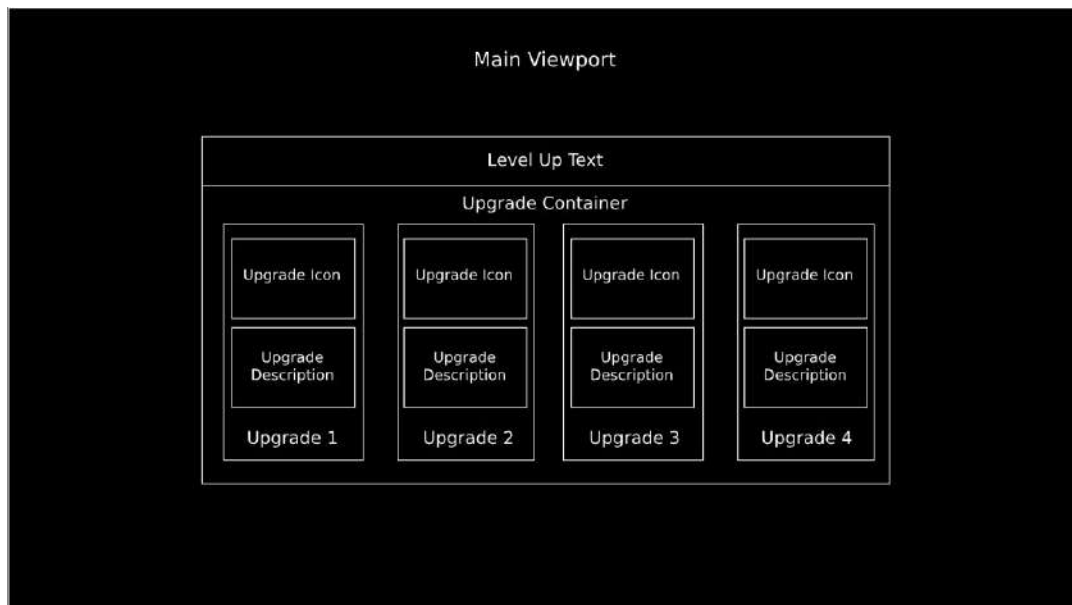


Iteration 3:

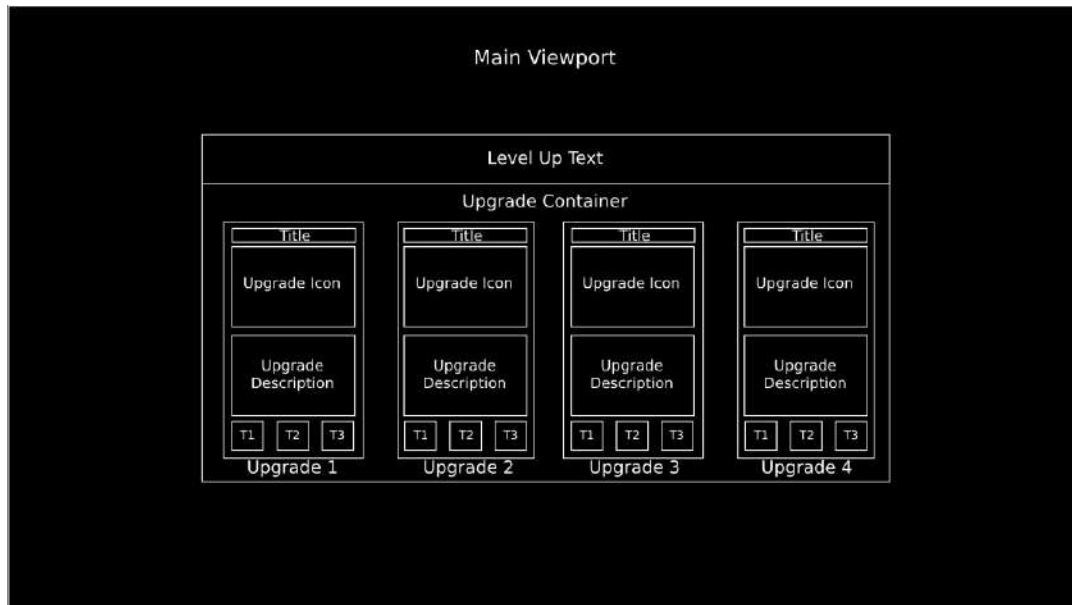


Upgrade Popups

Iteration 1:

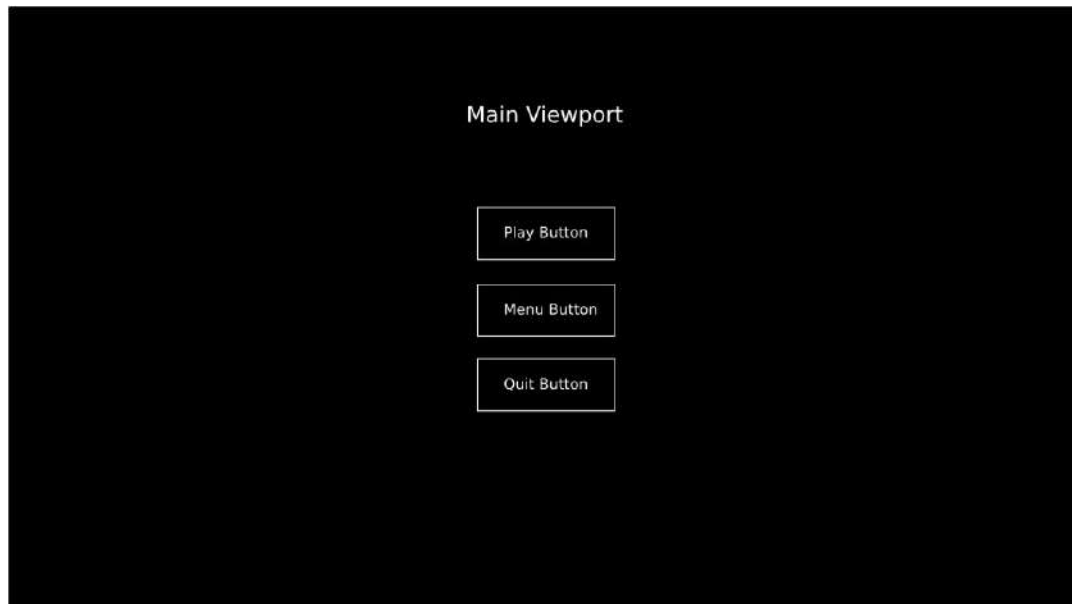


Iteration 2:



Pause Menu

Iteration 1:



Levels

I plan to have 3 level variations; these will be built by collections of floor templates with different shaders that distinguish each level.

The initial 3 levels will be:

- Woodlands
- Desert
- Snowy Lands

How levels will vary.

The enemy spawn rate & enemy damage will be increased via multiplayer for each level. As the game is endless it'll save the players' stats at the end of each game.

Each level will have its own ambience & weather patterns. Created via the Unity particle system.

Woodlands – Rain weather

Desert – Sandstorm weather

Snowy Lands – Snowy weather

The levels will scale as follows:

Easy – Woodlands

Medium – Desert

Hard – Snowy Lands

Asset List

The art assets will be 3D, modelled in Blender. I want the art-style to be low-poly as that works best with my current modelling abilities.

- Base Floor Templates 6 variations (with a height-based shader in engine to showcase each level type)
- Trees – 3 Variations with material scalability
- ~~Rocks – 2-4 Variations with material scalability~~
- ~~Foliage – Grass Variation with shader to produce sway~~
- Treasure Chest

Asset List			
Name	Type	Creation Method	Description
Environment			
Tree-v1	Environment	Blender	Small simple tree with leaves
Tree-v2	Environment	Blender	Simple tree with leaves
Tree-v3	Environment	Blender	A dead-tree with no leaves
Floor Plane-v1	Environment	Blender	Floor template 50x50 to snap with other floor templates
Floor Plane-v2	Environment	Blender	Floor template 50x50 to snap with other floor templates
Floor Plane-v3	Environment	Blender	Floor template 50x50 to snap with other floor templates
Floor Plane-v4	Environment	Blender	Floor template 50x50 to snap with other floor templates
Floor Plane-v5	Environment	Blender	Floor template 50x50 to snap with other floor templates
Floor Plane-v6	Environment	Blender	Floor template 50x50 to snap with other floor templates
Coin-Bronze	Environment	Blender	A bronze coin - giving low exp
Coin-Silver	Environment	Blender	A silver coin - giving mid exp
Coin-Gold	Environment	Blender	A gold coin - giving high exp
Chest	Environment	Blender	A chest that drops pickups
UI			
Kill Counter Icon	UI	Photopea	A small UI skull icon to indicate the kill counter
Timer Icon	UI	Unity Free 2D Sprite	A small clock timer that fills based off time (0-60seconds)
Lock Icon	UI	Unity Free 2D Sprite	Lock Icon that shows an upgrade/weapon has not been unlocked
Level Up (Progress) Bar	UI	Photopea	A solid bar with gradient to display the players total exp
Health Bar (Progress) Bar	UI	Photopea	A solid bar with gradient to display the players total health
Weapon Icon - Base	UI	Photopea	A simple icon to display the players weapon
Upgrade Icon - Armor	UI	Photopea	Icon for Armor upgrades
Upgrade Icon - Turret	UI	Photopea	Icon for Turret upgrades
Upgrade Icon - Speed	UI	Photopea	Icon for the Speed upgrades
Upgrade Icon - Demolition	UI	Photopea	Icon for the Demolition upgrades

Audio List

Audio elements will be sourced from free to use websites i.e (ZapSplat, FreeSounds.org) with royalty free & commercial use.

Audio List

Background Music

- Main Menu Music
- In Game Music
- Level Theme Ambience (Rain, Snow, Sandstorm)

Game Sounds

- Tank Tracks Movement
- Shot Fired
- Shot impact on ground
- Shot impact on target (explosion)

- Button Click
- Level Up

Creative Design Document (CDD)- Mood-boards

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Game Over & Win Screen:

