# **Drifty Shooty Loops GDD**



Arena battle vehicular manslaughter bipedal horse drifting

# **Table of Contents**

Table of Contents	2
Overview Game Concept Theme Gameplay Pillars	<b>3</b> 3 4 4
Gameplay and Mechanics Gameplay Driving Drifting Shooting	<b>5</b> 5 5 5 5
Prototypes Drifting Prototype IK Animations Prototype Network Prototype	<b>6</b> 6 6
Narrative Story Characters Riders: Horses: Gunners: Game World	7 7 7 7 7 7
Levels Training Level? Map Designs Farm Map	<b>8</b> 8 9 9
Interface In-Game UI Title Screen	10 10 10
Animations Inverse Kinematics Horse	<b>11</b> 11 11

## Overview

Platform: PC Windows

Genre: Multiplayer, Driving, Action, Shooter

Number of Players: 4 players

Camera: Third Person

Length of Play: 1 to 2 minutes

Target Audience: 15 to 30 years old

#### Game Concept

**Drifty Shooty Loops** is a 4 player team based arena game where teams of 2 face off against one another in vehicular combat. In a tight arena the drivers must navigate the area effectively in order to avoid getting shot by the enemy, once a team has a clear shot on an opponent the copilots must shoot the opponents to knock them out of the game. The first team to reach 3 points wins.

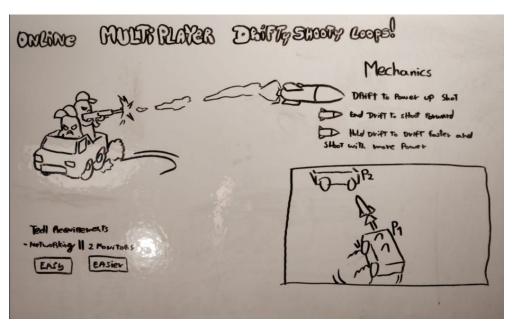


Figure 1: Initial sketch concept of the game and it's mechanics.

## Theme

Option 1 - Wonky West

The player is a wobbly cowboy drifting on their horse through the farms.

Option 2 - Llama Fight

The player is a saliva spewing llama, spitting at other drifting llamas.

Option 3 - Mongol Raid

The player is a Mongolian raider, spearing other raiders in a contest.

Option 4 - Spilled Milk

The player is a cow with a leaky udder. Unstable and

## **Gameplay Pillars**

Push the player into Action Intuitive and easy to use Dual Purpose mechanics

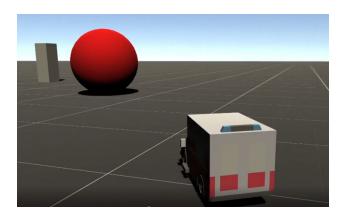
# Gameplay and Mechanics

## Gameplay

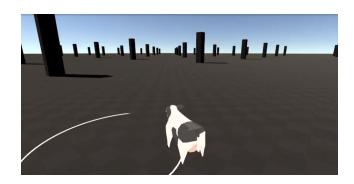
The gameplay of Drifty Shooty Loops consists of three main mechanics: driving, drifting, and shooting.

### Driving

Driving in Drifty Shooty Loops is tight and reactive, similar to how the driving feels in Mario Kart.



## **Drifting**



## Shooting

## **Prototypes**

#### **Drifting Prototype**

The drifting prototype consists of an open landscape with pillars and a moving vehicle object. The point of the open landscape is to prototype the drift mechanic which uses an adjustable acceleration, radius measurement, and object width in order to calculate the variables needed to smoothly maneuver.

#### **IK Animations Prototype**

The IK animations prototype contains an open space with three models, a human skeleton, a car and a tiger. These models were picked for testing the different ways the team could use IK animations. While the car is limited to IK animations, the human and tiger have multiple limbs making them perfect for testing out IK animations. The tiger specifically is used in place of the horse character, they're similar because of their 4 legs.

#### **Network Prototype**

The network prototype will focus on establishing a working connection between two players on two seperate systems over an internet connection. This will enable a much larger audience for the game, connecting players worldwide.

## **Narrative**

#### Story

While haybaling a steep hill, Farmer Joe overestimated his tractor's ability. The hulking machine toppled down the slope, turning Farmer Joe into mincemeat. But what is happening at the farm?

Bovine dominance quickly spreads through the barn. But without anyone to milk their overflowing udders, they soon descend into a state of chaos. Mad Cow Disease runs rampant, forcing the animals to disobey the laws of nature and target their own kind in a ritualistic area battle.

Who will be the last cow drifting? Who will have the most drained udder? The answers to these questions are only a click away in **Drifty Shooty Loops**.

#### Characters

#### Riders:

The player's who drive the horses

#### Horses:

The rideable character the players are attached to.

#### Gunners:

The player's that control the game on the back

## Game World

An unmonitored barnyard field, scattered with environmental obstacles and cradled between rolling hills. Sunny skies make for tasty milks.

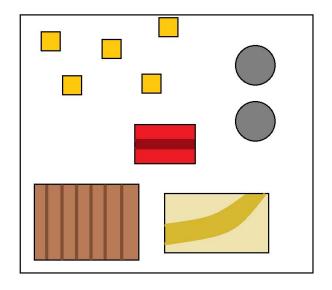
# Levels

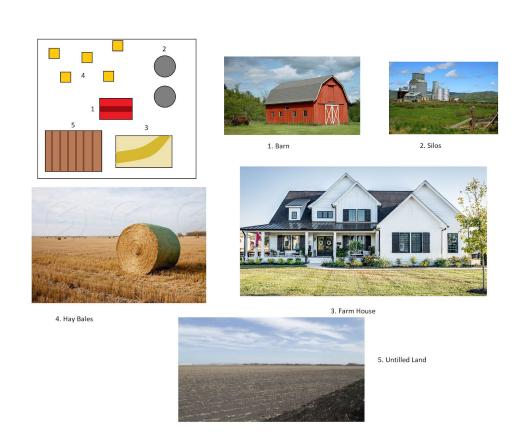
Training Level?

## Map Designs

## Farm Map

An open farm with many outdoor obstacles big and small along with a short indoor section that acts as cover.





# Interface

#### In-Game UI

**Charge meter:** A meter that represents the total charge of the weapon while drifting. This helps the player visualize the amount of power they have before firing.

#### Speed?

**Round Score:** Keeps track of the total score of the game.

**Timer:** A timer set up for each round.

**Blown Up Text?** 

#### Title Screen

**Play Button:** A button to start the game.

**Settings:** A button that leads to a settings menu, you can adjust audio volumes here.

**Quit Button:** Closes the game to desktop.

# **Animations**

## **Inverse Kinematics**

This project uses IK along with the produced animations, this is because it will add fluidness to each animation and prevent stiff movements.

## Horse

The horse has multiple parts that use IK, head, legs, torso, all with varying weights. The head follows where the player is heading, the torso follows the head, and the legs adjust to the elevations of the ground.