

Drifty Shooty Loops GDD



Arena battle vehicular manslaughter bipedal horse drifting

Table of Contents

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

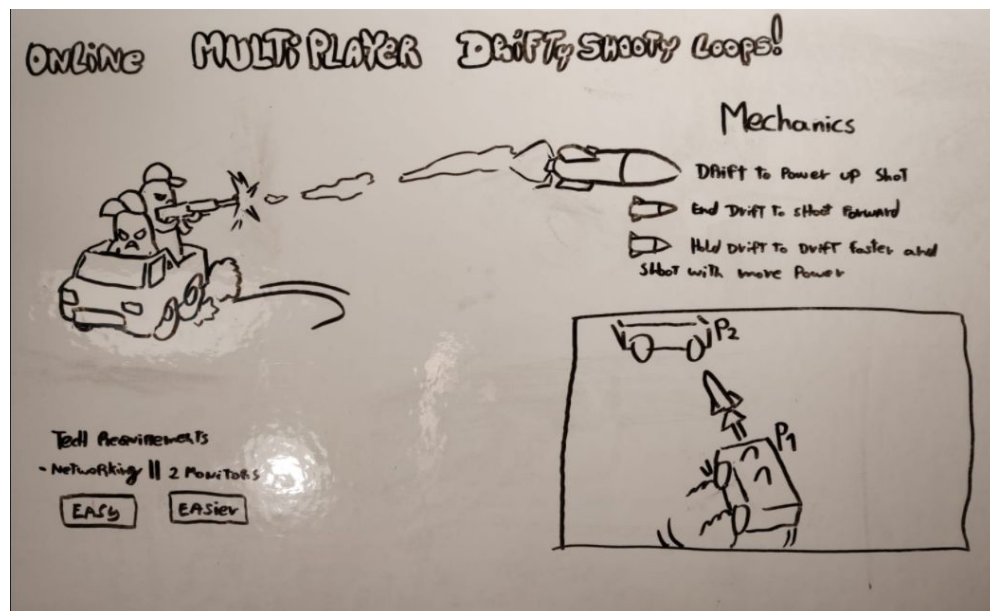


Figure 1: Initial sketch concept of the game and it's mechanics.

Theme

Option 1

Wild West

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

Gameplay Pillars

Push the player into Action

Intuitive and easy to use

Dual Purpose mechanics

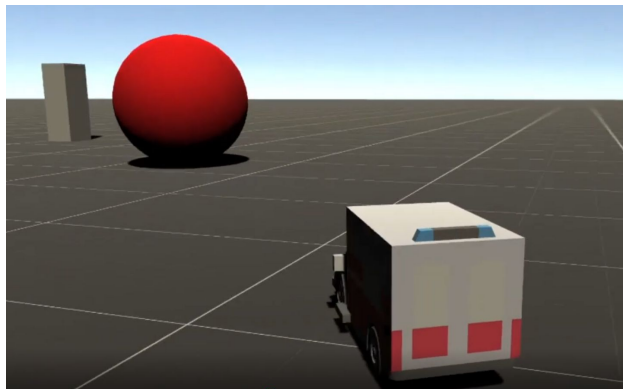
Gameplay and Mechanics

Gameplay

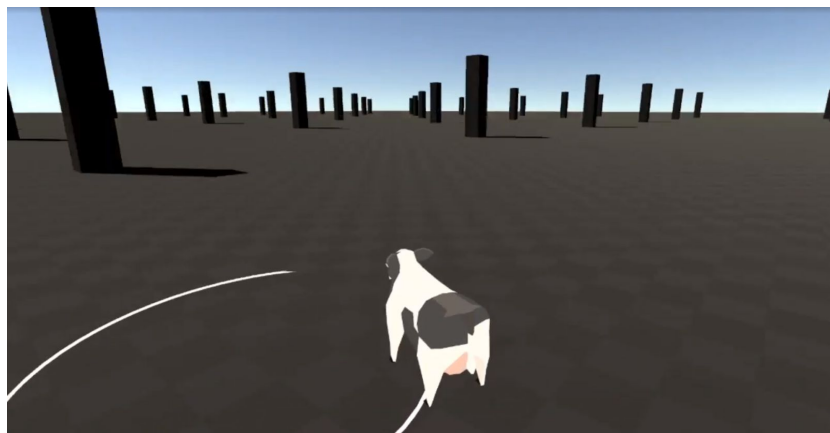
The gameplay of Drifty Shooty Loops consists of three main mechanics, driving, drifting, and shooting.

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

Narrative

Story

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

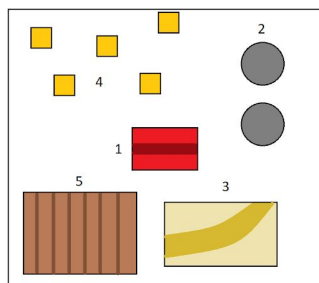
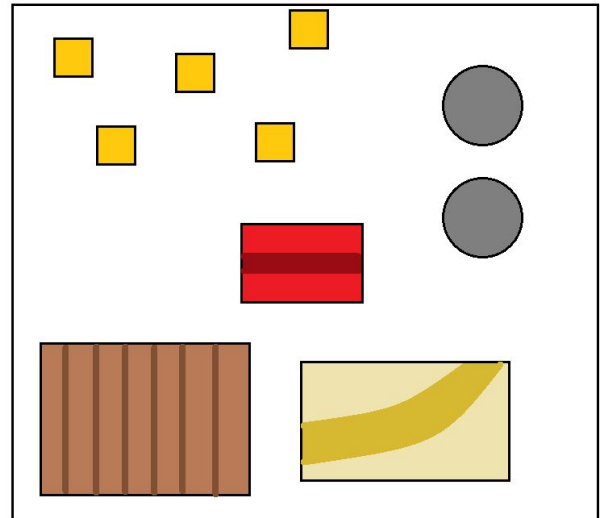
Levels

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.



1. Barn



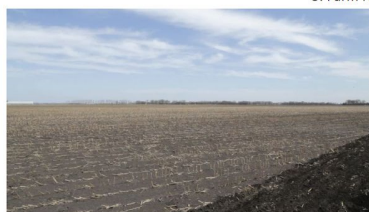
2. Silos



4. Hay Bales



3. Farm House



5. Untilled Land

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.