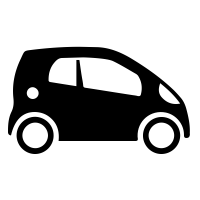
CoinChaser Game Design Document (GDD)

***‘Slow and steady wins the race.’*** - you

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# 1 Game Overview

Title: CoinRacer

Platform: PC Standalone / Laptop

Genre: Arcade

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: May 9th, 2016

Publisher: Mark Shark Park Studios

Description: CoinChaser is a third-person point of view, car game. The Player was a real person and while driving his vehicle he mysteriously went into a portal that took him to the CoinChaser’s game world. It seems easy enough to collect coins and reach the finish line before there is no more time but the levels drastically change. To cross the finish line the requirement is to collect all of the coins. The need for speed can be the player’s downfall. There are signals and hints throughout the game that provide foresight on how to best tackle the next levels; giving the player a higher probability to beat the game.

# 2 High Concept

Obstacle course race against time.

# 3 Unique Selling Points

The greatest thing about this game is that it heavily relies on creativity in order to maintain the game’s integrity of addiction and fun. Luckily, there is no end to creativity for obstacle course based games.

# 4 Platform Minimum Requirements

Any computer operating system.

# 5 Competitors / Similar Titles

Back when Halo Reach was hot, there were a lot of custom/pre-built modes available for the public. One of the more known modes was Deathrace. An obstacle course mode where players are in a vehicle trying to reach the checkpoint and many obstacle courses were very imaginative. This game was created based off that idea.

# 6 Synopsis

The player controls a lightweight car with wheels that are heavily influenced by momentum. As the track changes from a standard race-track to an obstacle course with moving/floating platforms. The braking functionality becomes the most important mechanism than pressing on the gas. Treading carefully is the key to besting the CoinRacer game.

# 7 Game Objectives

The Game Objectives are simple. Collect all coins in every level successfully without while running out of time. The time changes every level but if you run out of time on any level, you will have to begin from the beginning.

# 8 Game Rules

Beat the obstacle course and you must collect all the coins in every level in order to advance to the next level.

# 9 Game Structure

# Level 1 consisted of all elements of the game which then became prehab’s for reusage for the other levels. However, to avoid repetitiveness in levels, different obstacle course mechanisms were created to make users feel different with for each and every level. This was a way of quickly keeping players addicted to playing the game.

# 10 Game Play

The gameplay is heavily dependent on the car’s moving functionality which heavily influences the feel for playing this obstacle course-based video game. It is much more difficult than a simple platformer. It is like human platform but ice platforms.

## 10.1 Game Controls

The game controls are as follows:

Accelerate Forward: W or Up Arrow Key

Reverse: S or Back Arrow Key

Left: A or Left Arrow Key

Right: D or Right Arrow Key.

Brakes: Spacebar.

## 10.2 Game Camera

The Game Camera is attached to a cube that is placed above the car. By doing so we avoid jittery cases if we had just left it attached to the car itself. The little jitters would cause annoyance and lead to a negative view on the game. The camera should be extremely stable in order to benefit the player.

### 10.2.1 HUD

### 10.2.2 Maps

Every level derives from a base Terrain created in another level.

# 11 Players

The only player is the game is you. You are driving the wheel and no one else is available for assistance aside from my hints!

## 11.1 Characters

The only character in the game is the Player controlling the car.

## 11.2 Metrics

The most important Metric are the DAU(Daily Active Users). By knowing whether the daily active user counts are increasing, Mark Shark Park studios is able to determine when to push out updates in order to add more levels to stay ahead of the curve. Thus, more DAUs.

## 11.3 States

Game Object/Game Status is on all levels in order to keep track of the state of each scene. Since the game is like an obstacle course and no items can be attained for assistance. The only things that can be transferred states are the sound, music, animation, aesthetics, etc.

## 11.4 Weapons

There are no weapons in CoinChaser. The greatest weapon is your spacebar.

# 12 Player Line-up

Player – Car Vehicle.

# 13 NPC

On levels 2 and 3, there are billboards that provide hints and foreshadow which almost act the same as an NPC. Although, the billboards are not able to make requests. You could say the billboards are more willing to assist rather than pesky NPCs who require side-questions to be finished.

## 13.1 Enemies

The only enemy is yourself. Do not become consumed by greed of win. It will lead to hasty decisions thus, your downfall.

### 13.1.1 Enemy States

### 13.1.2 Enemy Spawn Points

## 13.2 Allies / Companions

Your allies are the billboards which provide you information about the obstacle course. Occasionally, some texts will also be displayed giving you foresight.

### 13.2.1 Ally States

### 13.2.2 Ally Spawn Points

# 14 Art

The artwork in this game is very retro. There are color patterns to different platforms/objects that can tell you what each of them do. For example, the red platforms have animations tied to them which move them around.

## 14.1 Setting

All the settings are preset and cannot be changed. The functionality and mechanism of the car is important for the game to run as intended.

## 14.2 Level Design

The level designing for every level was entirely created using Unity. Props and other aesthetic appeals were created through blender. A majority of the level designing was based off of the car’s mechanics due to its tendency to move with even the slightest momentum.

## 14.3 Audio

There are exactly 3 audio sounds. Background music that transitions through all of the scenes, Super Mario’s coin noise when a player collects a coin, and the engine that revs when speeding up or reduces rev when slowing down.

# 15 Procedurally Generated Content

After the level designing came the generated content, using Unity’s 3D object tools, animation, and blender a lot of prefabs were self-created and reused on multiple levels.

## 15.1 Environment

There are two sets of environments. The mountainside roads where grass, rock, and asphalt are always seen and above the mountainside roads floating in the clouds on platforms. One level combines the use of both mountainside roads and being elevated both it.

## 15.2 Levels

There are three levels. The first level is a basic racetrack with coins set for easy pickings. The second and third level change locations from the ground to being elevated on platforms. The coins are specifically placed on platforms which could make the levels challenging.

## 15.3 Artificial Intelligence NPC

## 15.4 Visual Arts

Majority of visual arts were created from Blender and exported. Others were created using Unity’s animation tool like the rotating coins or particle system for confetti effect.

## 15.5 Audio

There are exactly 3 audio sounds. Background music that transitions through all of the scenes, Super Mario’s coin noise when a player collects a coin, and the engine that revs when speeding up or reduces rev when slowing down.

## 15.6 Minimum Viable Product (MPV)

It has already been known back in the early 2000s that classic obstacle course games were a huge hit because they were so addicting and satisfying to finish. Moreover, many games and MPVs were still in discovery. However, nowadays video game developers are taking advantage of MPVs and incorporating them together.

# 16 Wish List

I wish I switched over immediately to a platform game the moment I knew I was struggling with getting the correct wheel colliders. Perhaps, I was too blinded by my eagerness to create a fast/futuristic car racing game.

Luckily, I realized my car mechanisms were perfect for an obstacle course-based game. Since that was the case, I was then forced to rewrite/write new scripts for a platform based game.

17 Genre

The genre for my game is a racing video game. The game takes place in third-person perspective with slightly adjusted camera settings depending on the format of the level. The car races against time to collect all the coins in the level in order to cross to the finish line. If the car must “try again” due to the car getting stuck/fall off, the player must start from the beginning and collect all the coins again while the timer is still running. Once the timer hits 0, you must click the “out of time” button in order to restart the game.

In a sense, my game genre could also be somewhat arcade. Many of the levels require you to be extremely cautious and aware with what buttons you are pressing. Otherwise, you will fall off the platforms. This game requires good hand-eye coordination and can be frustrating.

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