Table of Contents

[1 **Game Design** 3](#_Toc314742033)

[**1.1** **Game Analysis** 3](#_Toc314742034)

[**1.2** **Game Concept** 3](#_Toc314742035)

[**1.3** **Game Goals** 3](#_Toc314742036)

[**1.4** **Game Genre** 4](#_Toc314742037)

[**1.5** **Target Market** 4](#_Toc314742038)

[**1.6** **Gameplay Direction** 4](#_Toc314742039)

[**2** **Features** 5](#_Toc314742040)

[**2.1** **Required Features** 5](#_Toc314742041)

[**2.2** **Bonus Features** 6](#_Toc314742042)

[**3** **Gameplay Details** 6](#_Toc314742043)

[**3.1** **Rules** 6](#_Toc314742044)

[**3.2** **Power-ups** 7](#_Toc314742045)

[**3.2.1** **Speed Boost** 7](#_Toc314742046)

[**3.2.2** **Projectile** 7](#_Toc314742047)

[**3.3** **Interface** 7](#_Toc314742048)

[**3.3.1** **Startup Screen** 7](#_Toc314742049)

[**3.3.2** **Driving UI** 7](#_Toc314742050)

[**3.4** **Track Design** 7](#_Toc314742051)

[**3.5** **Exciting Moments** 7](#_Toc314742052)

# 

# 1 Game Design

Our game puts you behind the wheel of a futuristic racer in a contest that tests your reactions while besting highly competitive AI racers to be the fastest on the track.

Fast paced racing and moments of pure speed define this game as you work to overtake your opponents at breathtaking rates.

Power-ups are powerful tools that boost your own performance, allowing you to take game changing shortcuts that will throw your opponents for a loop.

Mastering the use of projectile power-ups is essential in overtaking your fellow racers, and sending your enemies to the back of the pack.

Each race will be different than the next, as highly intelligent AI racers will aim to pass you any chance they get while you contend with the numerous challenges the track poses.

* 1. **Game Analysis**

Our game is a casual, futuristic racing game similar to games like Mario Kart and Diddy Kong Racing.

* 1. **Game Concept**

Our game is a futuristic racing game that pits the player against multiple AI driven racers in a bout that requires skillful driving at high speeds, and accurate firing of projectiles to best your opponents.

Each race declares a single winner based on the racer with the fastest time accumulated after the player completes the required number of laps.

* 1. **Game Goals**
* The main goal of our game is to provide a FUN racing experience for the player, not a realistic one.
* The player’s vehicle should be easy to control and get the hang of, creating an easy to jump into game experience.
* A power-up system that allows players and AI racers to increase their performance by boosting things such as speed, as well as disrupt other players.
* Three power-ups can be held at a time, allowing racers to hold onto power-ups until they are needed most.
* AI controlled vehicles, combined with a performance boosting power-up system should provide a dynamic experience each time the player races.
* Certain power-ups should allow all racers to take shortcuts that will significantly reduce their lap time if used properly. This is intended to create a heart pounding sense of urgency, as any other racer could close in on the player in the blink of an eye.
  1. **Game Genre**

Our game is a casual futuristic racing game built for the PC, intended for gamers who wish to enjoy a simple, yet fun and exciting racing experience. Use of an Xbox 360 USB controller will be required to play.

* 1. **Target Market**

Our target market for this game is anyone who wishes to enjoy a casual racing experience. This entails all age groups, and any gamer who is not looking for a hardcore, realistic racer.

The game should be simple enough to appeal to anyone, yet pose enough challenge that seasoned players and newcomers alike will want to continue playing in order to master their racing abilities.

* 1. **Gameplay Direction**

We want players of our game to have an enjoyable, casual racing experience that they can jump right into. Our main goal is to focus on solid driving mechanics, and a fun world to drive in; solid track design with a number of shortcuts is essential in creating this atmosphere.

While players should find the controls simple and intuitive, level design should pose the player with enough challenge that they wish to race again and again trying to master the level. As well, every time the player races, we expect them to have a different experience due to the attacking AI racers as well as the power-up system that allows for disruption of other racers. This system will not allow players to simply master the track and then drive the same each time, but will instead force a more reactionary style of gameplay.

Gameplay will be centered around both speed and chaos, as all racers will be consuming numerous power-ups. Being in first place at any given time will not be a good indicator that the player will win the race, but will instead instill fear in them since every other racer is gunning for them. Conversely, when the player is in last, all hope is not lost, as a single shortcut could launch them ahead of the pack.

1. **Features**

Fun is the name of the game and these features will be the central focus to delivering it.

* 1. **Required Features**

**Power-ups:** Boost your own speed or nail your enemies to propel yourself to first place.

**Shortcuts:** Hang onto your power-ups and use them strategically to take a quicker route to the finish line.

**Intelligent AI:** Other computer-controlled racers will be constantly vying to overtake you through any means necessary.

**Challenging Track:** This isn’t NASCAR, and our track reflects that with sharp turns, jumps, obstacles, and terrain that will keep you on edge.

* 1. **Bonus Features**

These features may be implemented if we find them to be fun and we have enough time to do so, but the game will not be planned around them.

**Additional Power-ups:** Improve your traction on uneven surfaces or bash your opponents off the track with endless power-up ideas.

**Dynamic Track:** Driving over buttons on the track can change the shape of the entire course, and spiral your opponents down a path of confusion.

**Multiple Vehicles:** An assortment of vehicles at the player’s disposal can be selected, all with varying statistics, to give the player a fine tuned automobile that suits their personal play style.

**Additional Tracks:** Multiple tracks with varying degrees of difficulty will keep player’s entertained for hours, and provide a high level of variety for player’s to enjoy.

1. **Gameplay Details**
   1. **Rules**

Each race will consist of one human player and a number of AI controlled racers on a track. Once the player completes the required number of laps to finish a race, the race will end. Every racer will then be ranked according to the speed at which they completed the race, with the racer who obtained the lowest time coming in first place. How any racer gets the fastest time however is completely up to them.

* 1. **Power-ups**

Every racer on the track will be able to accumulate up to three power-ups by driving over them. After each power-up is picked up, they will then surround the racer. At any point during the race, if a vehicle has at least one power-up they may choose to use it and gain the benefits it offers.

* + 1. **Speed Boost**

By using a speed boost power-up, the vehicle will gain a temporary boost to their current speed. This can be used to pass your opponents, or jump large gaps that a vehicle could not normally pass over without increased speed.

* + 1. **Projectile**

When a racer uses a projectile power-up, it is fired in the direction the racer is currently facing. If another racer is fairly close to the fired projectile, the projectile will then seek out that racer until it strikes it. Upon striking another racer with a projectile, the target that was struck will be temporarily disrupted.

* 1. **Interface**
     1. **Startup Screen**
     2. **Driving UI**
  2. **Track Design**
  3. **Exciting Moments**