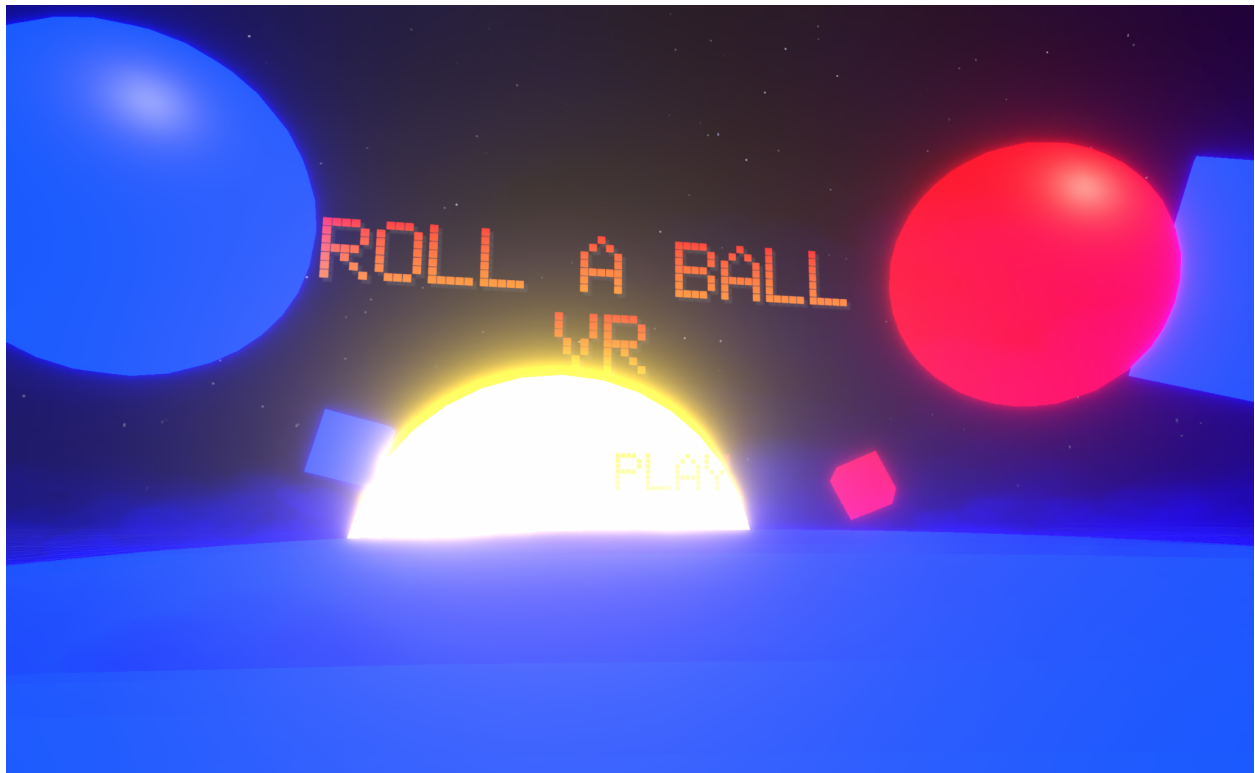


# Roll A Ball VR

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## Project Overview

Roll A Ball VR is a recreation of the iconic Unity tutorial in VR form complete with new levels, animations and immersive player mechanics.

Roll A Ball VR is a love letter to the iconic Unity tutorial bearing the same name. It was for many, (myself included), their first foray into the world of video game development. Alumni of the tutorial once immersed in the world will feel great nostalgia as they reconnect with the game while newcomers should find joy in the simplicity

While adhering to the original tutorial game, Roll A Ball VR innovates in a number of key areas:

- Levels and Scenes - Roll A Ball VR features a Home Screen scene a faithful remake of the original level and an entirely new level
- Visuals - As the original game was made for a tutorial it heavily lacked in visuals. Using Unity's Universal Render Pipeline and some great assets Roll A Ball VR stuns just as much as it dazzles

- Immersion - Roll A Ball VR takes advantage of VR as a medium allowing the player to interact with the environment in ways only VR makes possible all the while immersing the player in breath taking scenes.

**Roll A Ball VR is a familiar, stunning, novel, and immersive experience that pays homage to the source of which its built upon and leaves players, new and old, smiling from ear to ear.**

## PostMortem

What worked well	What didn't work well	What would be done differently if done again
Controller based player control	Immersive VR player controls aren't as responsive as controller based controls	VR button and joystick assets from the asset store would be used and I would learn from their source code how to create better buttons and joysticks
Menu settings adjust the game level accordingly	Selected settings in the menu don't carry from scene to scene	I would figure out how to have the settings carry from scene to scene via some script
Levels and home screen looked visually appealing	While the Home Screen was great, Levels 1 and 2 could have been more visually stunning	I would spend more time making all the levels visually stunning

## What was learned?

Faithfully recreating a game from scratch isn't too hard when a tutorial for it exists, however, I wanted to build this game on my own to test my skills, and they were tested. Porting the game over to VR proved to be a challenge as I had to figure out how to convert the functionality from controller based input into virtual physics based input. A joystick was originally the primary choice for player movement but creating that functionality proved to be beyond my skills and so button based controls were implemented. These buttons worked but consistently getting the buttons to collide with the players hand also proved to be incredibly difficult wrestling in button press attempts failing. The menu button was originally a physical button but failed consistently return to its original position once pressed for no apparent reason and was thus replaced with a UI button instead. All in all I gained a lot of experience creating VR based input and strenftrhed my skills and understanding of core game mechanics. Without a doubt, Roll A Ball VR was a worthwhile project for sure.