

Squat Racing Retrospective

This is retrospective of my game for the VRCPrefabs valentine's jam 2021.

Note: This is somewhat incomplete and was written looong ago. Hope it inspires you nonetheless!

The Good Stuff

Overall, I'm quite happy with how Squat Racing turned out! If you've not tried it before, [click here to visit the world](#).

Squat Racing

pic.twitter.com/z5bctYrHhv

— (@North365) February 15, 2021

My entry into the [@VRCPrefabs](#) World Jam combines SQUATTING and RACING! [@thenosjo](#) helped with 3D modeling, so join us this weekend for a LOVELY WORKOUT ♥♥ pic.twitter.com/aAYSRx4pLH

— Fax (@Faxmaschine) February 10, 2021

Devs Together Strong

When I first created squat racing, [Nosjo](#) created 3D models and occasionally took a look at my code - though we mostly worked separately.

Three months later I wanted to improve the project. And to my surprise, it was in a *beautiful* state. Comments everywhere. A nice scene hierarchy. No editor warnings. Having someone peek over my

shoulder seems to have affected the way I work in a very positive way - even though it was mostly a solo project!

Of course it's possible to work cleanly when working solo - but it can be tough to be disciplined during a game jam. My most recent world, [Draw. Guess. PANIC?!](#), shipped with many networking-related issues. And now, mere weeks later, they seem impossible to fix due to band-aid fixes and no documentation. Not only did that make the world worse, it was also a bit of a downer.



In 'Draw. Guess. PANIC?!' You better not disconnect, or things might break..!

TL;DR: Collaborating with someone made me work more cleanly.

Simple, Strong Core Idea

How do you do an exercise *game* in VR? Some users like to watch a video and follow along, but I wanted to create something more interactive.

The simplest thing I could think of was tracking the player's head position and forcing them to squat. [Petey](#) was quick to let me know that [Squat Gym](#) does exactly that. With Squat Racing I tried to utilize that same mechanic and to turn it into a game! With twists, and turns, and all that.

Squatting is easily explained, and everyone know what a race is. "Squat Racing" seems like a magic phrase that turns a lot of heads. Most players seem to have a good time! Having a low skill floor and high skill ceiling was great for keeping players motivated.

Creating Squat Racing was relatively simple, so I was able to iterate on my prototypes. Which was perfect for a game jam!

TL;DR: The concept was simple, engaging and easy to implement.

How to squat!

PC:

Hold



VR:

Arms forward

Bend legs slowly

Don't lean left / right

The Bad Stuff

Clear Goals

Most players who play squat racing do a single lap, say they enjoyed it, and leave the world. They don't try to get a good time, try to do multiple laps or discover the secret bonus-part of the race track.

The stats: Only around 30% of players who join the world complete a lap. Around 10% of them attain a solid grasp of the game's mechanics. That's... less than I hoped for. And it became obvious quickly into the project's development!

Now, on the bright side players say they have a good time! Especially those who take the time to understand how Squat Racing works. But I seem to have underestimated how difficult it is to learn the game!

Now, the core rules can be expressed in four sentences:

1. Press both triggers to start racing
2. Stand up straight to go straight
3. Crouch to turn
4. The direction you turn flips after every crouch (left - right - left - right)

Most players would then proceed to press both triggers, endlessly bump into walls or keep spinning in a circle. The panic sets in, and they forget the instructions (even though they're right in front of them!)

What Squat Racing is missing is a **safe environment to learn the rules**. Players start in a walled-off area, which is covered in grass to slow them down. But that still meant that players had to do too many tasks at once. Find the tutorial, read it, try it out, try not accidentally move away - ideally I would have placed players in an endless void to let them try out the mechanics safely.

Tangled cables



VR players don't all have wireless headsets. This can cause issues when you have a circular race track. Doing three laps can take as little as 90 seconds, so playing for 30 minutes twists your cable **20 times**.

Here's two things I did to mitigate this:

- Put up an in-game poster warning players to not get tangled (seen above)
- Turn the track into an 8-loop (added post-launch)

Neither is an ideal solution. And I learned from my mistakes! In Super VR Ball many levels are arranged to prevent the player from getting tangled. Still - unless wireless headsets become the norm, keep tethered users in mind!

In conclusion

I'd say it went quite well for a two week projects! But it's certainly not without its flaws, and I'm sure there's untapped potential here. I don't see a lot of fitness games on VRChat, but following my release of Squat Racing, VRChat created a special row for workout wolds! And a few weeks later, [VRChat held a game jam for racing worlds](#).

If you'd like to listen to the soundtrack, [visit my SoundCloud](#)! And if you like, please leave a comment below. Be as candid as you can, I'm sure there's something to be learned from any feedback you might have.

Revision #12

Created 25 January 2022 14:10:54 by

Updated 16 February 2022 11:18:53 by