STARS Universe game notes

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| --- | --- | --- |
|  | Easy | Difficult |
| High priority | * Experiment with first person cockpit view * Make loading screen look prettier * Make braking controls more intuitive | * Connection test before loading user-generated planets |
| Low priority | * Show X, Y and Z symbols as well as colours for grid (can teach kids about coordinates and 3D space) | * Try implementing wormholes to traverse to other areas, with wormhole creation functionality. Try having an actual tunnel * Make gyro steering work better * Experiment with controlling acceleration and the three rotation axes using two 2D sticks |

Look into implementing grid system for organising planets (similar to Vitaly’s setup)

Notes from Vitaly's space thing

* Controls are designed to use both the keyboard and mouse at the same time
* Game environment is laid out in a grid
  + Six different coloured axes stretching out in the positive and negative cardinal directions
  + The grid is denoted visually with coloured dots. There are large dots marked in alphabetical order out from the centre, with smaller dots marked 0-9 inbetween.
  + A seventh axis is present, showing real planets in the Solar System
  + Andrew Hill wants planets laid out in a grid in this manner, with the ability for players to warp to a planet by selecting its grid/colour coordinates, rather than just raw position data or name. I'll probably need to make a system involving relative positioning and coordinate scaling
* Sun is made using a particle system that generates stationary particles in a sphere
  + I was able to enable pre-warming so the sun is already fully formed
* Teleporters exist to allow the player to easily return to the centre, but that might be redundant with the warping that already exists to travel to different planets
  + Teleporter controls are wonky, a prompt appears when the player reaches a certain point, but will disappear when moving past a certain point, leaving the player stranded with no way back.
* A cube-shaped teleport at the centre exists to allow the player to teleport to a different solar system.

Notes from square avoiding stealth game

* Player is in a rubik's cube/menger sponge shaped enviroment and must traverse each room without running into the red squares
* In the build I played, there was no obvious way to detect the red squares. For this kind of game, the player needs to be able to predict the enemy movement and form strategies accordingly, like timing or influencing enemy behaviour

Amazon's Sumerian

Look into VRchat development, modding and SDK

Apparently requires a specific version of Unity

VR tennis game

Balls are launched at you, deflect them to hit a target

Targets shrink over time so difficulty escalatea

STARS stuff – 25/11/2021

I already have a CV and references

I’ve been slightly tweaking this and sending out several job applications

I obviously haven’t gotten a job yet, but I’ve gotten as far as having one studio keep my resume on file

While it’s important to put effort into the CV and cover letter, the most important part is the portfolio. To that end, I’ve been working on projects.

A big thing I need to focus on with my projects is making sure they are complete and polished, even if they’re small. Unfortunately, I haven’t been able to use most of my projects over my years of working at TAFE for this reason.

I was actually recently diagnosed with ADHD (roughly a couple of months ago). I believe this is the cause of my poor portfolio, due to not having the concentration to see projects through. Now that I am taking medication for it, my productivity has increased dramatically.

Things to look at

* Make spaceship controller, smooth and responsive with gyro controls
* Look at Tennis Esports <https://www.tennis-esports.com/>
* 2D tennis game, gameplay is top down but records a 3D playback
* Planet creation system
* Look into animations <https://sites.google.com/view/starstv0000/starstv/studio/animations>
* AR ‘hide and seek’ game where players explore the world using their smartphones to find secret markers (markers are specified using stickers or photographs or some other visual medium)

Talk to

Ideas Andrew has for space game thing

* Spaceship controller
* Visit other planets
* As well as manual control, select a planet to automatically warp there

Look at for reference for planet creation thing

* Gravity <https://lab.nationalmedals.org/gravity.php>
* Galaxy Makers <https://www.galaxymakers.org/>
* Look at Celestia
* Look at Tiltbrush

* Look into stuff I discussed with Andrew Hill
* AR.js
* <https://ar-js-org.github.io/AR.js-Docs/marker-based/>
* Moving Marvels
* WebAR
* AR in Unity
* Space Conquest 3D (as reference for gyro controls in STARS Universe)
* Niantic Lightship
* Stereokit VR

I can’t tell if I’m an idiot for not understanding what he’s going on about, or if he’s an idiot who's awful at explainibg it.

He waffles around the damn point for way too long in a super vague manner.

He'll jump back and forth between tangents in a way that makes it super hard for me to figure out what he’s specifically trying to say and how certain bits relate to other bits. The amount he trys