HOT SPACE JUNK

Game Design Document:

HOT SPACE JUNK

"Hot Space Junk is a high-speed VR game where you pick up and sort intergalactic trash as fast as you can. With an interesting extendable arm mechanic, shiny and fun graphics, and quick-as-a-whip dialogue and characters, put in your community service time while making the universe a cleaner place."

Story

a. <u>Setting</u>
   A trash collection and processing site on a small, rounded platform in a distant area of space.

b. <u>Narrative</u>
   The game takes place in the distant future where space trash is a real problem. You have been ordered to complete community service in space and help with the trash issue. Some trash is more valuable than others, and with quick thinking and reflexes the player can be a model citizen and reduce their sentence.

c. <u>Characters</u>
   Very official and adorable looking aliens are making sure to it that you see out your community service properly. They will guide you through the training and provide tips, tricks and unsolicited advice.

Gameplay

a. <u>Core Loop</u>

The player will be using both hands that extend out into space (litter pickers) in order to grab trash as it zips by. After grabbing an item, the player will scan the item on a scanner directly in front of them. After scanning, a colour will appear that will indicate the sorting bin for that item. The player picks up the item again and drops/throws that item in the correct sorting bin. Points are awarded based on the colour of the item. As the levels progress, more and more colours are added.

b. Mechanics

A major selling point for the "fun" factor for this game will be the mechanics. Two extendable claw arms will feel like real hands but far away from the player. The thumbstick will extend the arms outwards, and the trigger and grip buttons of the controller will give grabbing control. In a similar way to a claw game, force, gravity and velocity will have an effect on how well you can reign in your items. Try to pull it in too quickly and you may just lose it.

c. Dynamics

The space garbage will be floating through the environment at different velocities. Once an item is picked up and brought close enough to the player, it will then have some gravitational effect (the item can be placed on the scanner and then dropped/thrown into a bin). Physics will have an effect on objects and how they act in space, and this could mean you could accidentally fling valuable rubbish back out into the universe.

d. Enemies

TIME IS THE ENEMY. The player must race against the clock to collect the necessary amount of junk in time. As well, the player will need to avoid grabbing an object called a "void star". If selected, this void star will negate a piece of trash from your bins.

Level Design

a. Progression

The player will progress through different areas of the galaxy. Each level will bring new and unique challenges. Some environments have some very strange trash…! Why does one level have so many bananas? Why does another have nothing but old CDs and cassette tapes? Why does space have this much trash in it anyways? It doesn't make any sense, but it definitely keeps the levels interesting! Levels will come with a 1, 2, or 3 star rating. In order to achieve 3 stars, there will be extra challenges to complete for each level such as collecting a number of a certain type of junk (such as bananas).
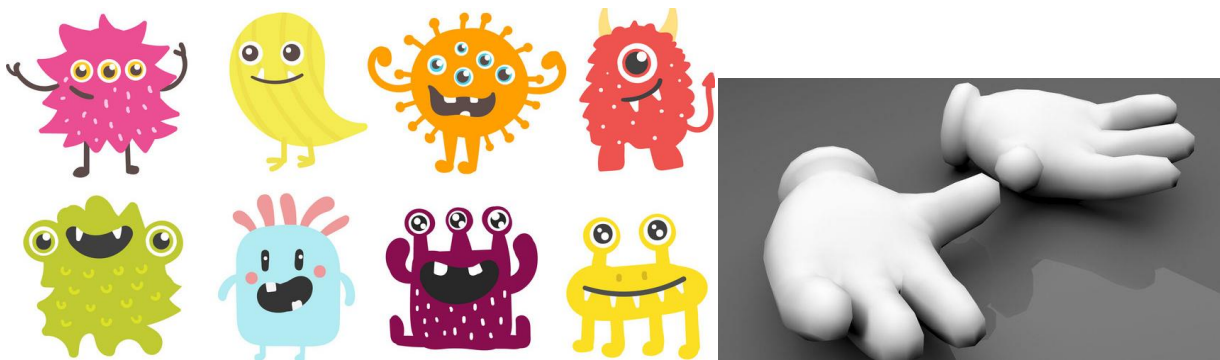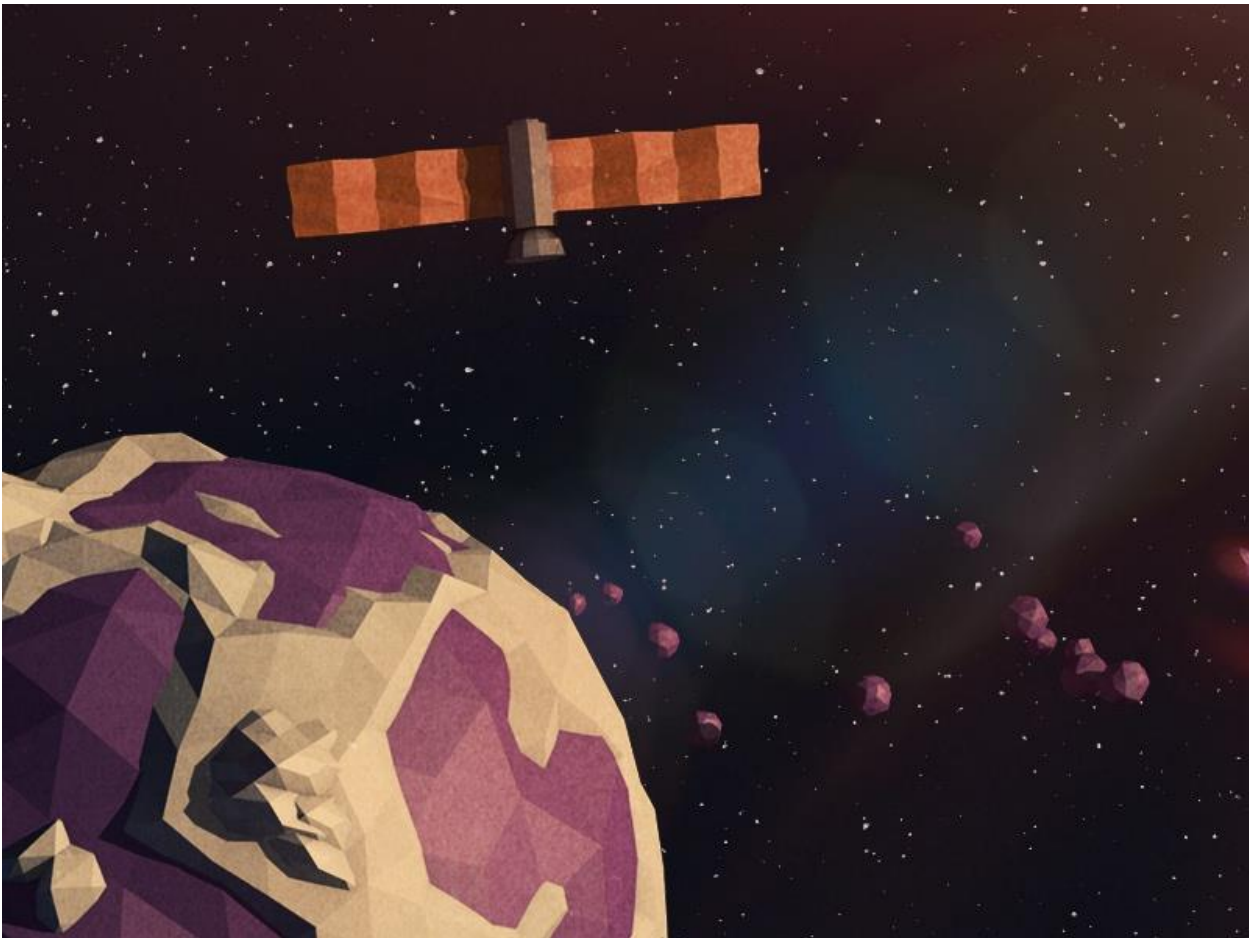
b. Environments

The environments will be low-poly, bright, futuristic and fun to be in. They will feel expansive, as you would expect space to feel. One thing that doesn't change is your garbage picking platform. It's small, and has just all the elements you need to pick up space trash and nothing more.

Art Style (Reference Photos)
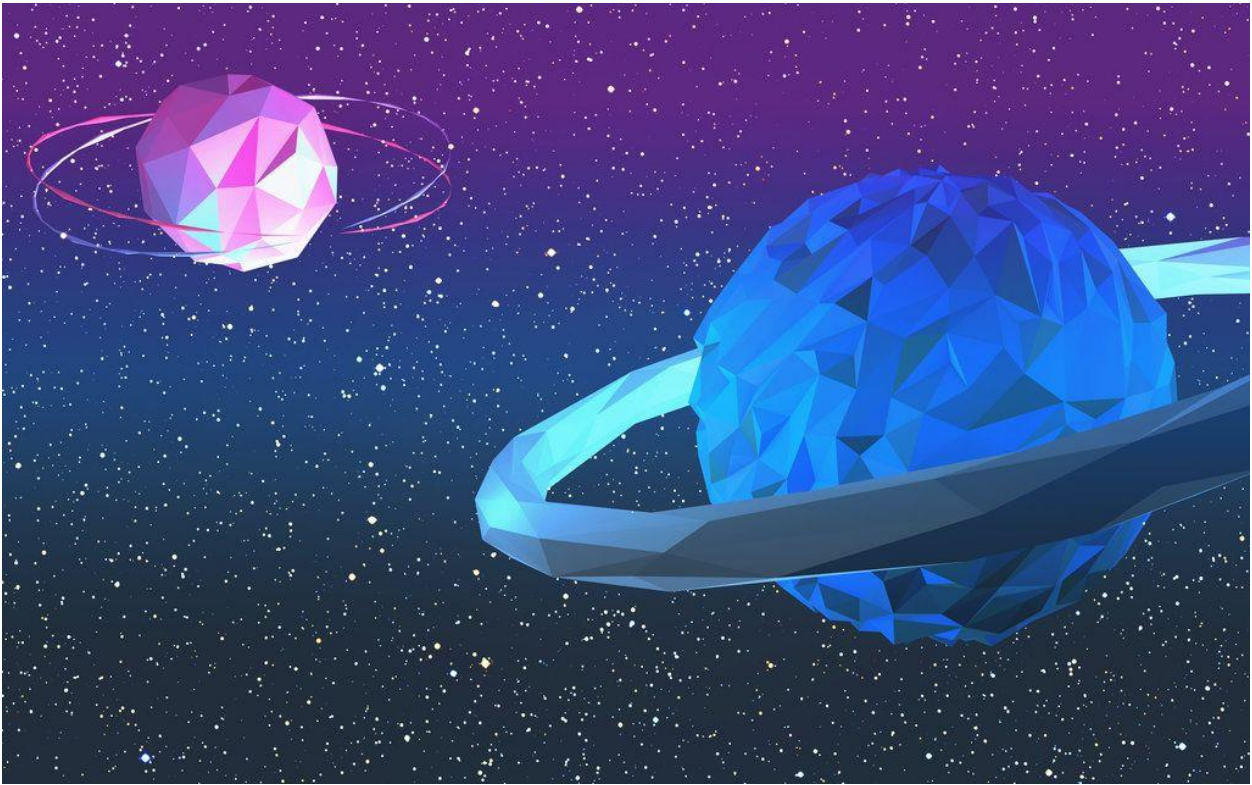
UI/Game Controls

    a. Specifications
    There will be a main menu where the player will be able to continue where they left off, or start a new game. Recent stats will show where the player is at. The menus will be simple, similar to Beat Saber or other level-based games. Game controls will mainly use the main thumbstick, trigger and grip buttons on both controllers.

Audio

    a. Some levels (depending on difficulty) will have faster music. In general, the sound design will be playful and boppy. Sounds effects will be unobtrusive and satisfying to hear over and over again.

Target

    a. Target Audience
    The target audience for this game is the casual gamer. The type of player who will enjoy games like Beat Saber, Pistol Whip, SuperHot etc. This game is for people who do not spend large amounts of time in VR and to pick it

up to blow off steam or de-stress at the end of a day. The target audience will be of any gender, younger, in the 18-30 range but it will be desirable for just about anyone.

b. Target Device
Target Device will be the Oculus Quest 2. The development will use OpenXR and therefore be applicable across most other headsets. The target platform will be on the Oculus Store. Initially, beta testing will be conducted on SideQuest for general bugs.

Analysis

a. Market Analysis
As far as my research can tell, this type of game doesn't exist on the VR market currently.

b. Tech Analysis
VR tech is advancing at an exponential rate and it cannot be understated how important it is to keep up on the trends. It is possible that by release date, the tech we developed for no longer exists or is obsolete. I don't think this will be the case but it is important to mention otherwise. The nice thing about the Oculus Quest 2 is it is untethered and requires no further equipment other than the HMD and touch controllers. The Quest 2's portability makes it a great choice for bringing to a friend's house to play for a bit. It is also worth mentioning that the VR industry as it currently stands, is unpredictable. We don't exactly know where it is going to go…and for this reason it may be worth analyzing down the line and assessing the possibility of other platforms like Nintendo Switch or PC.

Game Marketing

a. Promotions
The game will be free initially on SideQuest for beta testing. Hopefully this will drum up some awareness around the game and get some VR users talking. When it debuts on the Oculus store, there will be periodic sales.

b. Community
To reach influencers and then the general public, heavy marketing will be done on Youtube, Twitch, Itch.io, Discord, Reddit, etc. The main thing is to get as much exposure as possible, and get as many people talking about how addicting and ridiculous HOT SPACE JUNK is!

Development Plan

a. If I am the sole developer, I estimate that this game will take about 6 months to one year to fully design and produce. If I have assistance with programming, art design, sound design, etc., I think this project could be finished in a fraction of this time. The first step is to make a quick prototype of a level to ensure the game mechanics really are fun to play, and that the player wants to do it more than once. Game mechanics will be an absolute essential to nail down before attempting anything else (subsequent level design, sound design, game art and asset creation, UI) because it will really make or break this game and determine whether it has any "juice".