

Virtual Metro Game Design Document

Executive Summary

- **Concept:**

Virtual Metro is going to be a space exploration, 3D first person, MMORPG. Players start in orbit around the main solar system after they select their starter ship and have access to malls, shops, gas stations, etc. This solar system will be fictional and constantly getting bigger as well with more planets, space stations, and features. All space stations and planets in the main solar system will not be user owned, however eventually users will be able to create their own solar systems and customize it how they please.

- **Genre:**

The setting will be far into the future with humanity expanding throughout the entire galaxy. Most of the game will have its emphasis on space travel and exploration however there will be a large amount of content and exploration to be done on planets and surface colonies.

- **Scope:**

Because the virtual experience will be based on multiplayer exploration and not on main quest lines, it will not require years to complete like many other games. With an amphibious development team and a collaborative community the game can be finished fairly quickly, ranging from several months to a year. After its completion, more features and content start to roll in from the community.

- **Audience:**

Metaverse enthusiasts who want a free and open experience to connect with others. Space enthusiasts who are interested in spacecrafts, planets, colonies, etc.

- **Other Info:**

Virtual Metro will be part of the infrastructure of Lamina1. It will use Lamina1 wallet for login, Lamina1 blockchain, and the Lamina1 SDK for Unity3d. VM will use a hybridized model, the game itself still runs from a central server but its assets are traded via a decentralized marketplace.

Gameplay

- Who:

After the player logs in with their wallet they will create their username, then the player can create a new avatar and customize it to their liking. There will be no specific characters for the user to play as.

- What:

The player's goal is to connect and socialize with others and explore different worlds. They will aim to be successful in a diverse in game economy based on the L1 blockchain.

- When:

The players do not have a specific end goal to finish the game. There is only a start and continuity.

- Where:

The player starts in the main solar system made up of dozens of planets and hundreds of space stations, colonies, and cities. They have the ability however to travel to other solar systems and eventually even create their own.

- Why:

The goal of Virtual Metro is to be a free and open galaxy virtual experience, where players can socialize and have freedom to play how they want to. There are no exact objectives or goals for the player.

- How:

The player goes to different planets, space stations, or different orbits depending on the changed values of inclination, eccentricity, and altitude through their spacecraft's control system. They simply click a destination or change in their orbit and the spacecraft automatically burns retrograde, prograde, normal, antinormal, and other different maneuver nodes to get to the selected destination.

Mechanics

- User Experience:

- i.) Mode of movement:

The user will always be in a first person mode with the ability to walk around their spacecraft, space station, or planet freely in an immersive, natural feel. They have the option while on a spacecraft or space station to switch to third person mode relative to the craft to look at the exterior however they please.

- ii.) Inventory system:

The user will have access to all their items, spacecrafts, and currencies. They can swap out different spacecraft at space stations or spaceports and can buy new items and spacecraft at any shops they visit if they have sufficient funds.

- iii.) Map system:

The map system can be accessed through your control panel on your spacecraft, space station, or spaceport. It can show the orbits of all planets and space stations, as well as your own spacecraft's orbit or trajectory.

- Objectives:

The objectives of the user vary from purchasing new spacecraft or items, discovering new planets and locations, creating a friend group scalable to entire factions, etc.

- Progression systems:

There will be a level system with xp based on new planets visited, new ships purchased, kills you get in battle, etc. The level system does not increase your health or damage, it is only a reflection of experience you have in the game.

- Core Loop:

Virtual Metro is not limited to being a game, meetings, socialization, parties, etc are all things you can do through Virtual Metro. However more features, planets, factions, space stations, and more will continuously be added to VM by the devs and community.

4X (Explore, Expand, Exploit, Exterminate)

i.) Explore:

Users can explore entire solar systems, ranging from the interiors of spacecraft and space stations to the entire surface of planets.

ii.) Expand:

Users will not only increase their levels, but also their inventory which ranges from special items to advanced and primitive weaponry and all their spaceships. They will also expand their friend groups.

iii.) Exploit:

They will use a wide variety of weaponry, spacecraft, and mining rigs to increase their currency, items, and levels.

iv.) Exterminate:

They will target enemy AI on the surface of different planets ranging from robots to aliens and will also target enemy players. They can also engage in mining missions.

Elements

- World Building:

All planets will be procedurally generated with value sliders to change aspects of those planets such as size, sphere of influence, number of moons, terrain, biosphere, atmospheric density and concentration, etc.

- Locations:

WIP

- Levels:

WIP

- Blocking Elements:

There will be nothing blocking the player from exploring. They can explore the entirety of the surface of a planet, every area on their own spacecraft or space stations. However they cannot manually control their own spacecraft as if they did they could burn too close to the sun and die or leave the solar system and free float. If they want to go anywhere they need to have their ship do it for them.

- Characters, Players, NPCs, Story

WIP

Elements

- Music Genre

WIP

- Art Style Examples

WIP

- Example Models

WIP

- Example Textures

WIP