



[CS-526] Final Report

Plan Odyssey USC Games

Team: Buffer Overflow

- Junhao Wang
- Xun Zhan
- Bhavin Shah

Team: Buffer Overflow



Junhao Wang

MS CS

Scene Design
Player Control
Shader Effect
Animations
Trailer & Slides



Xun Zhan

MS CS

UI Design
Simulation
Shader Effect
Animal Flock
Gameplay Demo



Bhavin Shah

MS CS

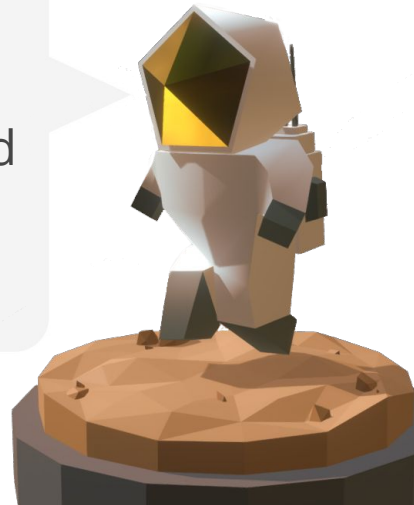
Gameplay
Task System
Snapshot
Player Control
Mobile Build

Background Story

After 100 years, brilliant scientists invent light-speed spacecraft that sends adventurers to explore human-friendly planets. — **Plan Odyssey**

Exploration is filled with **curiosity**, **hope**, and **peace**, without envy, hostility, violence, and risk.

You play as an ambitious astronaut who is employed to complete multiple tasks on those marvelous outlands.



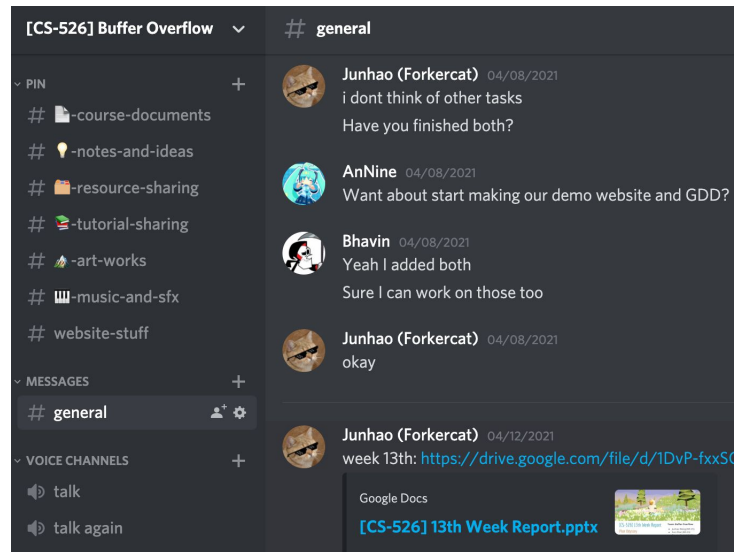
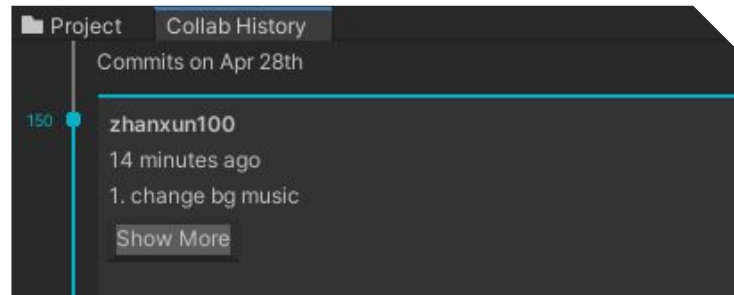
What We Have Done?

Plan
odyssey



Overview

- Collab History: **150 commits**
- Lines of Code: **> 10,000**
- Dev Folder Size: **11.24 GB**
- Discord: **~10 channels**



Task Completion

Done

Partial

Pending

Canceled

Player Controller	Jetpack Rocket	Player Animator	Sound FX (footstep, etc)
VFX (smoke, flame, etc)	Unity Collab Setup	Lightmap / Light Probe	Post-Processing
Hologram Shaders	URP Setup	Custom Render Pass	Touch Control
UGUI	FairyGUI	UI System	Topographic Scanner
Scene Design & Creation	Demo Scene	NavMesh & Animal AI	Behavioral Tree
Tooltip for Object Detection	Gradient Skybox	Planet Controller	Day / Night Cycle
Searchlight & Shader	Wind Controller & Wind FX	Compute Shader & Grass	Grass Painter Tool
Random Dust Particle	Cloud Shader	Water Shader	Core Gameplay
Snapshot Mode	Task System	Team Website & Trailer	Gameplay Demo

* Items in bold are finished after midterm

Game Trailer



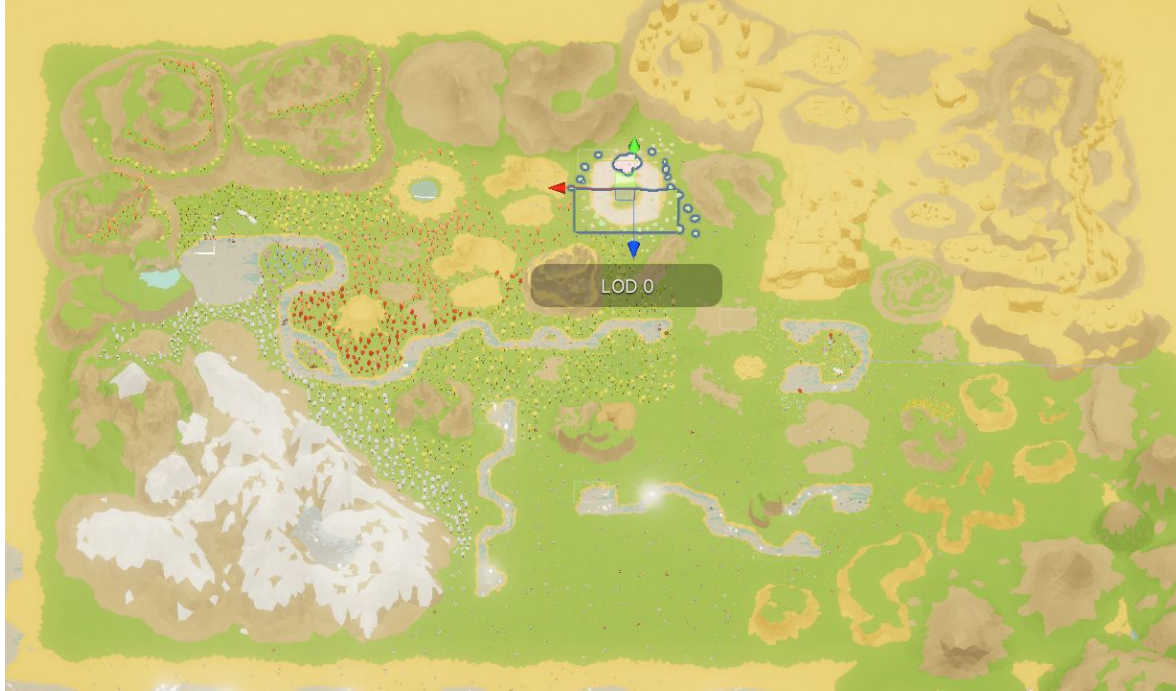
[YouTube Link](#)

Home Scene & Logo



Start Scene

Planet Andoria



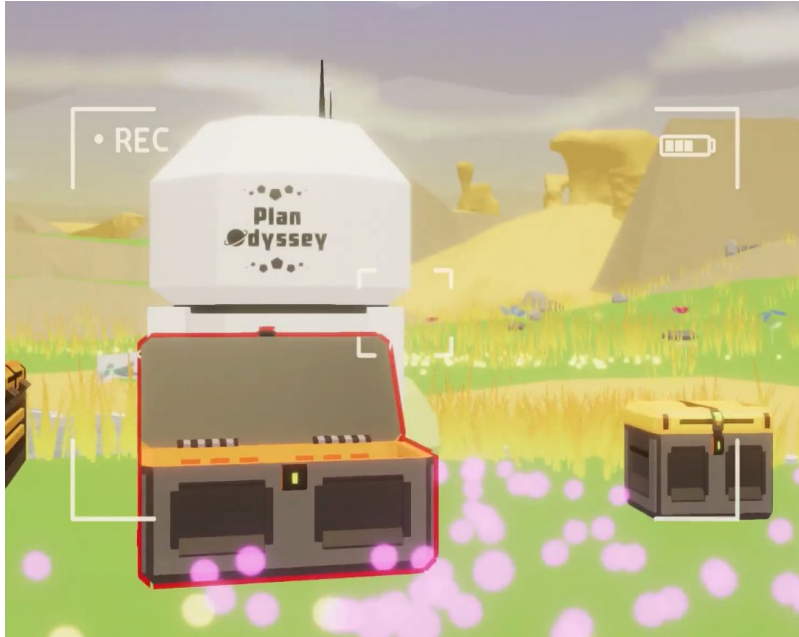
Scene Size: 1000 x 600 M²

Flock Simulation



Bird & Butterfly

Gameplay: Task and Achievement



Snapshot



Achievement

Gameplay UI



FairyGUI: Joystick, Task List

Gameplay UI



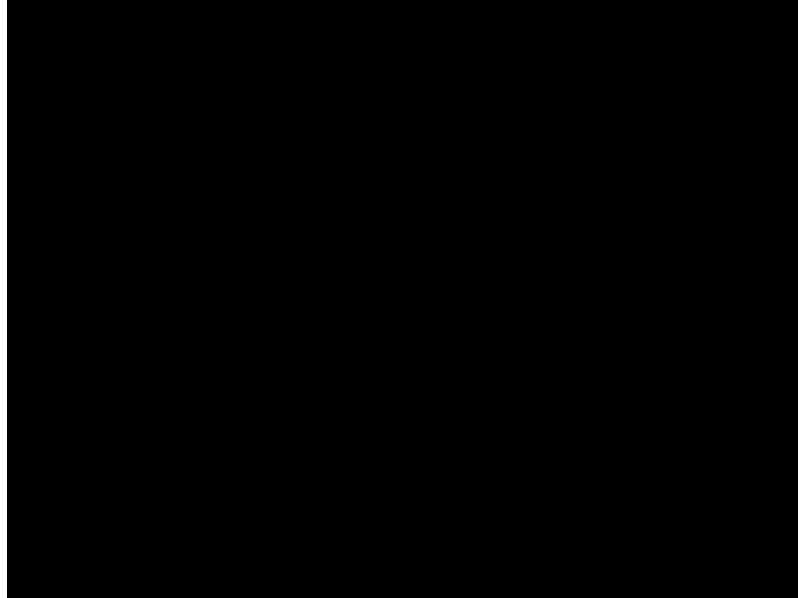
Tooltip: when players are nearby

Gameplay Demo



[YouTube Link](#)

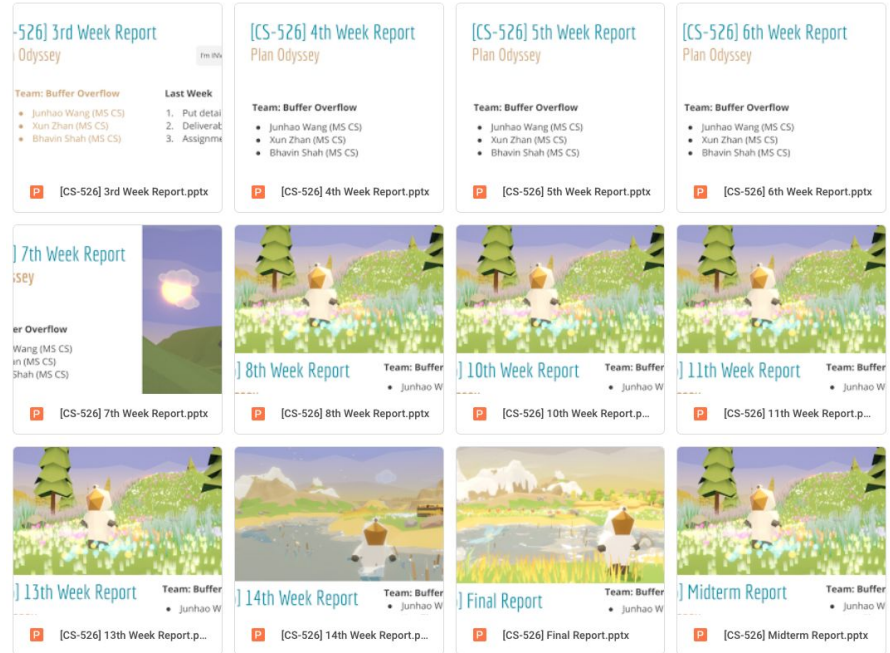
Build On Mobile



Playing on Samsung Galaxy S8

Documentations

- Website: [Link](#)
- Game Design Document: [Link](#)



Slides

Credits & Thanks To

Character:

- Stylized Astronaut - PULSAR BYTES

Terrain:

- Low Poly Modular Terrain Pack - LMHPOLY

Low Poly Models:

- Low Poly Forest - Starter Pack - Glyph Projects
- Low Poly Vegetation Pack - LMHPOLY
- Low Poly Rock Pack - Broken Vector
- Low Poly Tree Pack - Broken Vector
- Pixels Boxes - low poly - IDALGAME
- Polyverse Skies - BOXOPHOBIC
- Simplistic Low Poly Nature - Acorn Bringer
- Space Polygons: Lander Pack - PULSAR BYTES
- Stylized Crystal - LowlyPoly
- The Low-Poly Sci Fi Nature Pack - xzippyzachx
- Boats - Low Poly - Alstra Infinite
- Fissure: Low Poly Caverns - Distant lands

Audio & SFX:

- Classic Footstep SFX - Matthew Anett
- Footsteps - Essentials - Nox_Sound

Music:

- Cinematic & Atmospheric Modern Music Collection - Hidden Verses

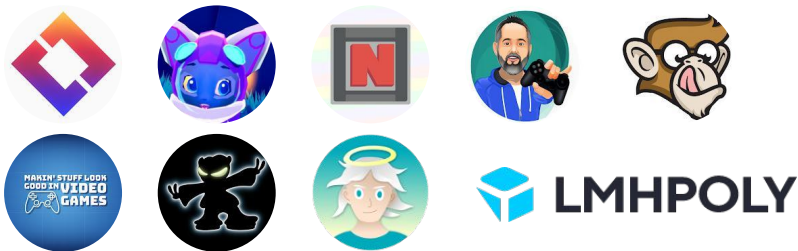
Icons:

- Cartoon FX Free Package - FXIFIED
- 40+ Simple Icons - Free - shuvadani

Tools:

- Grass Painter - Minions Art

Tutorial Makers:





Thank you!

