



# [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

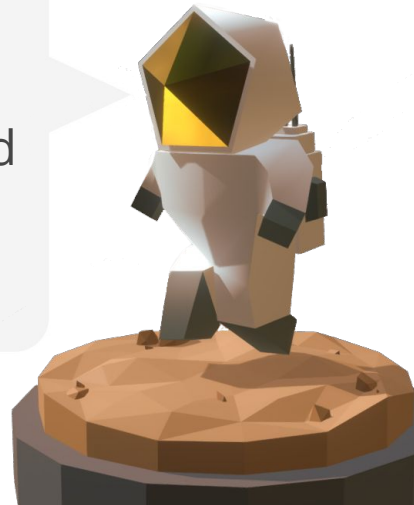
Gameplay  
Task System  
Snapshot  
Player Control  
Mobile Build

# 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.



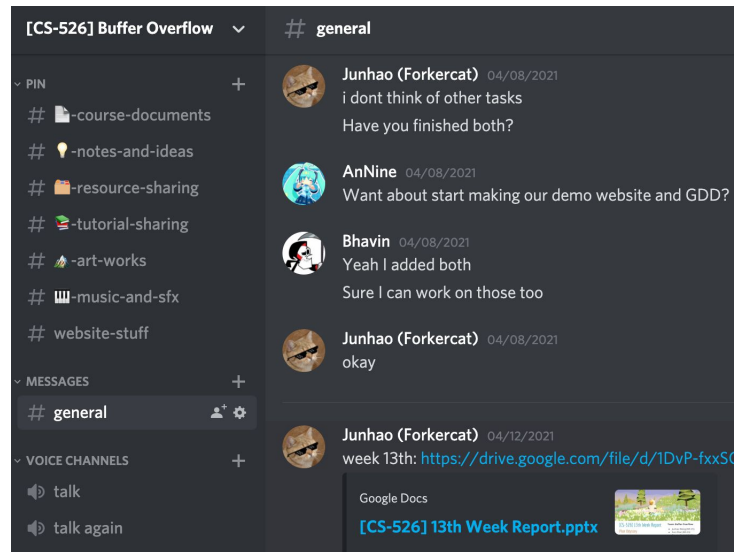
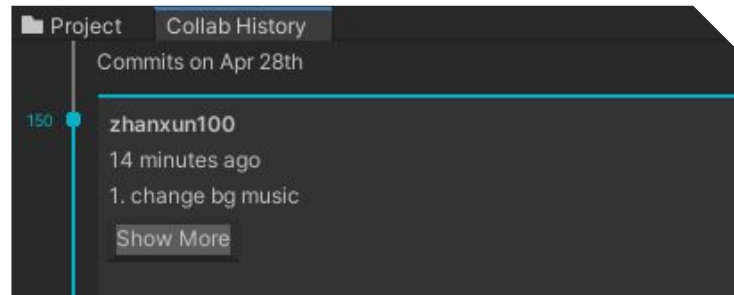
# What We Have Done?

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	<b>Touch Control</b>
<b>UGUI</b>	<b>FairyGUI</b>	<b>UI System</b>	Topographic Scanner
<b>Scene Design &amp; Creation</b>	Demo Scene	<b>NavMesh &amp; Animal AI</b>	<b>Behavioral Tree</b>
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	<b>Cloud Shader</b>	<b>Water Shader</b>	<b>Core Gameplay</b>
<b>Snapshot Mode</b>	<b>Task System</b>	<b>Team Website &amp; Trailer</b>	<b>Gameplay Demo</b>

\* Items in bold are finished after midterm



# Game Trailer



[YouTube Link](#)

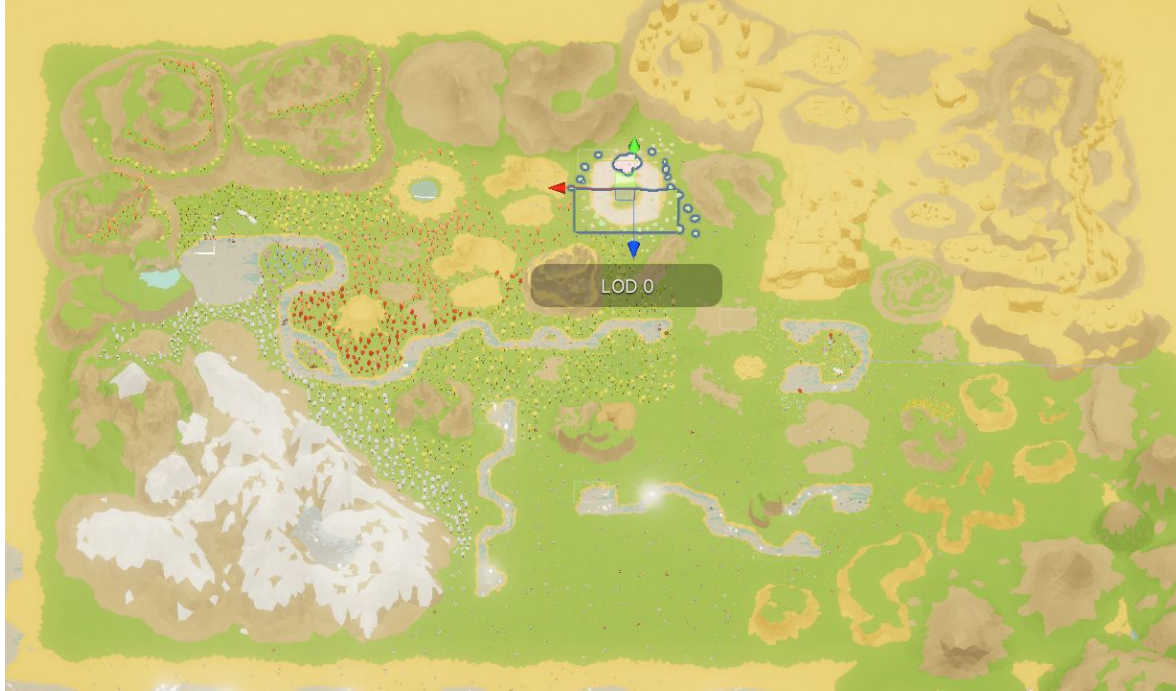
# Home Scene & Logo



Start Scene



# Planet Andoria



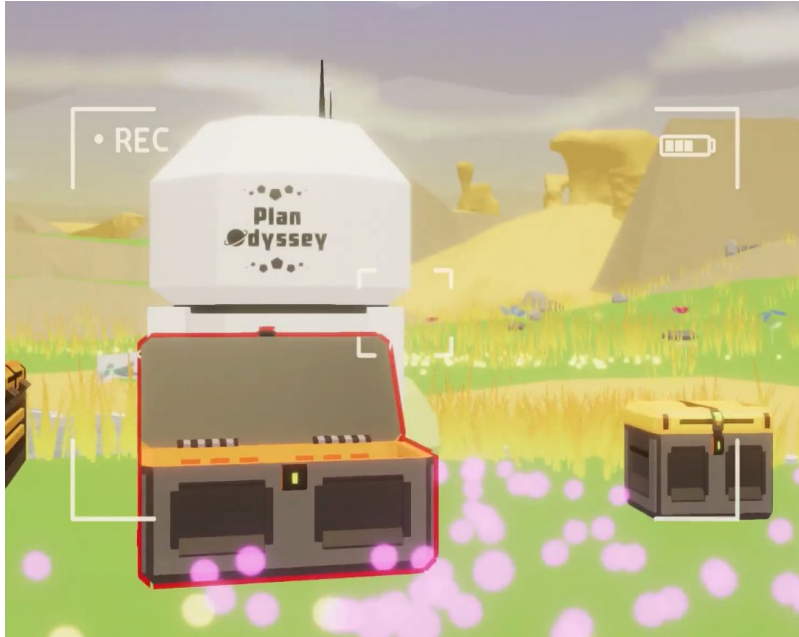
Scene Size: 1000 x 600 M<sup>2</sup>

# 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](#)



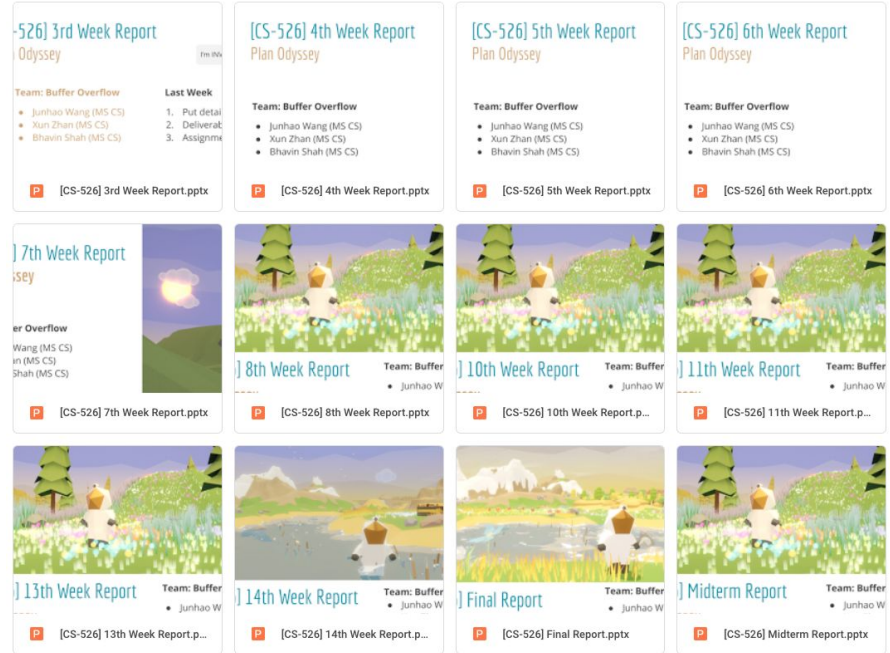
# Build On Mobile



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

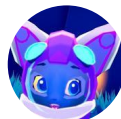
## Icons:

- Cartoon FX Free Package - FXIFIED
- 40+ Simple Icons - Free - shuvadani1

## Tools:

- Grass Painter - Minions Art

## Tutorial Makers:





Thank you!

