

Duck Ship Project – Winter/Spring 2026

Video Game Design Club – Unreal Engine Group Project

Project Overview

This expansive group project will focus on creating an **explorable space environment** using **Unreal Engine**. Inspired by classic space games like *Elite (1984)*, we will develop a **hand-crafted space level** featuring planets, space stations, NPC interactions, and several mission objectives.

Project Goals & Expectations

We already have a working playable demo that was created in Spring 2025. Each semester we will continue to build upon this space exploration game.

- A **playable, explorable level** showcasing a small solar system.
- Add collectable items
- Continue to improve spaceship controls and add new equipment and ship abilities
- Add new objectives and tasks
- Add sound effects and music
- A **gameplay test session** during our club's **Game Jam event**, where peers can experience what we've built.

This will not be a fully completed game, but rather a **prototype and proof of concept** that demonstrates our creative and technical abilities.

Flexible Development Approach

This project will be a **collaborative effort**, allowing students to focus on different areas based on their interests. Some possible areas of contribution include:

- **Worldbuilding:** Designing planets, space stations, and space environments.
- **Game Mechanics:** Creating spaceship movement, mission objectives, and interactive NPCs.
- **Art & Animation:** Modeling and texturing ships, characters, and environments.
- **Story & AI Interaction:** Writing dialogue, developing missions, or implementing AI-generated text.
- **Music & Sound Design:** Composing music, creating sound effects, and integrating audio.

We will **adapt the project based on team input**, ensuring that everyone gets a chance to explore areas they're passionate about while keeping a cohesive vision.

Procedural Generation: A Possible Extra Challenge

For those interested in **procedural generation**, this project provides an opportunity to experiment with dynamically generating aspects of the game world. While we will primarily focus on a **handcrafted space level**, students are welcome to explore ways to create **procedurally generated elements**—such as randomly placed asteroids, space debris, or terrain variations. Due to time constraints, we do not anticipate procedural generation being fully implemented in the final project, but students who take on this challenge can still showcase their work as an **experimental feature** in the final presentation.

Software & Tools

- **Unreal Engine 5** – Game development and level design.
- **Illustrator, Photoshop, and Blender** – Creating and texturing 3D assets.
- **ChatGPT API (Optional)** – AI-driven text for NPCs or a ship assistant.

Conclusion

This project is an opportunity to **experiment, learn, and create** in a collaborative game development environment. Whether you're interested in coding, art, storytelling, or sound, there's a place for your ideas. Each semester we will improve upon this visually compelling **exploration experience** to share with others. Let's bring this universe to life together! 🚀