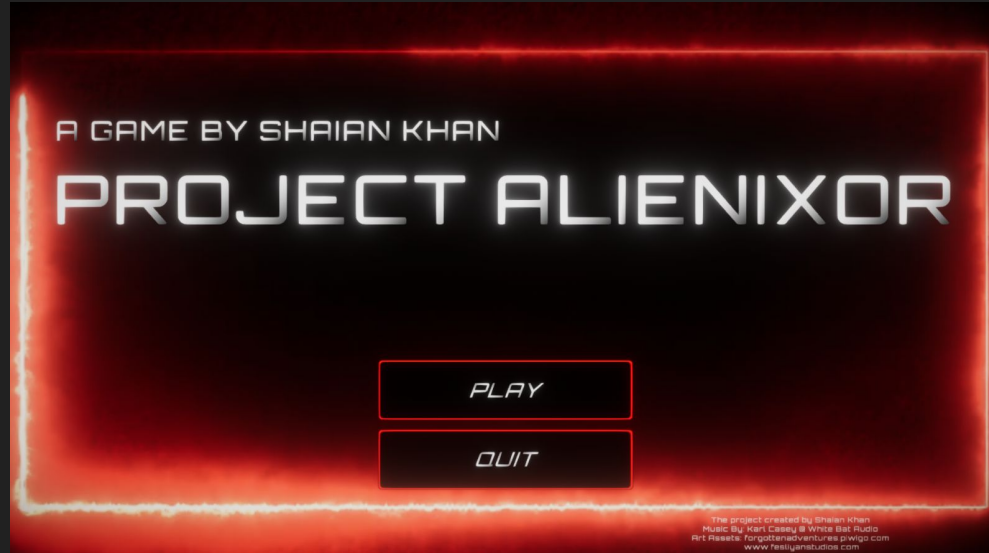


# ***PROJECT ALIENIXOR***



A Culmination Project  
By  
Shaian Khan

# Introduction:

My culmination project is a 2D top-down shooting game built on the Unity Engine. The title of the game is Project Alienixor. And my technical advisor was professor Hosni. The plan is to build one endless level in the game and the goal is to include an addictive nature that should encourage players to return to this game over & over.

Project Alienixor features a hardcore score based gameplay experience. The enemies will keep spawning and attack the player until the player dies. There will be a kill counter and a timer mechanic to determine the players' performance. The player will be able to shoot enemies from long range and be able to perform melee attacks during close combat situations. The main objective is to kill the demons to set a score and survive as long as possible.

# Project Alienixor Official Trailer



# Project Inspiration:

Project Alienxior is one of my ambitious projects that I have ever worked on during my academic career. I have worked on a number of Unity game projects at City Tech but this culmination project was an opportunity for me to express and enhance my creative skills.

The project idea is inspired by games like Returnal.



# The Planning Notes:

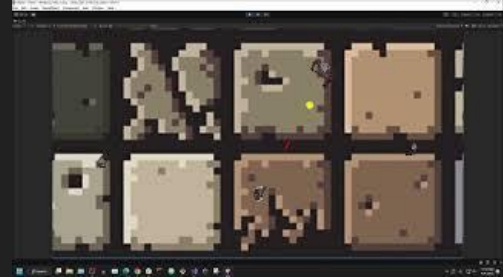
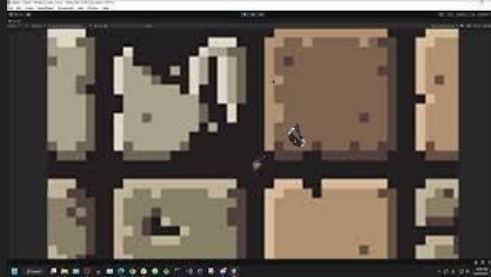
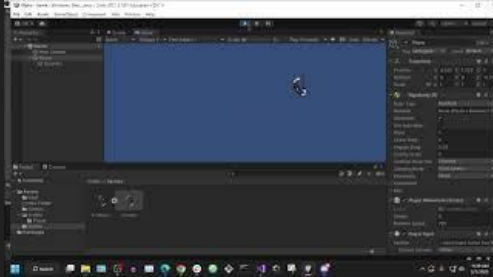
- Research & Find royalty free assets & sprites.
- Design Text based in-game introduction & UI elements.
- Use royalty free background music and sound FX for in-game events.

At the starting of the game there will some text based intro scene that explains how to play the game and how to use the controls.

The game should have an adaptive difficulty. Overtime the enemy spawn rate will increase and the game should get challenging for the players.

# Development Process I:

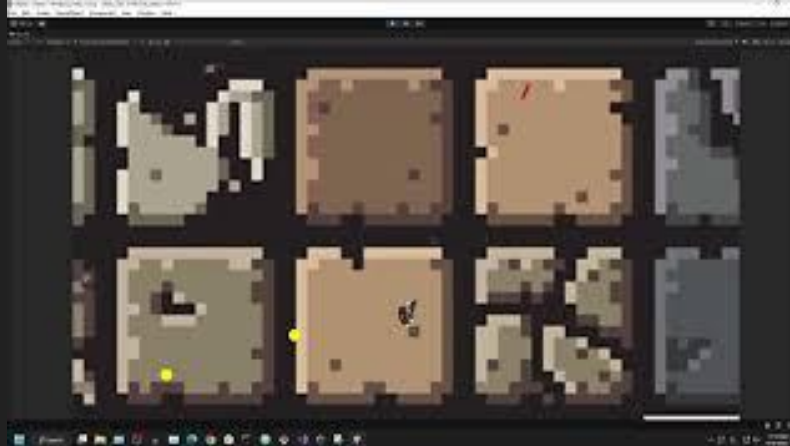
**Phase One:** At first the plan was to build the basic things to get working. Create a player object and a basic player movement script. The second step was to add enemy objects in the scene and write an AI script that follows the player around. Modify the enemy scripts so when the enemy object collides with the player it should destroy the player object.



# Development Process II:

**Phase Two:** After get the basic things done, it was time to build the first prototype and receive feedback from the technical advisor.

Based on the feedback I started working on adding and designing assets, create in-game logics and polishing towards the final product.



# Conflicts & Challenges:

- In game development conflicts & challenges are common. As a solo developer I had to come across several technical difficulties whether it's about setting up the codes or adding a complex in-game mechanic. This is the part where I would like to appreciate the support & assistance that I received from my technical advisor Prof. Hosni.
- There was a moment when I was struggling to set up some in-game scripts that were not working as I expected. I have reached out to Prof. Hosni and asked for his assistance. He provided me with the full support to resolve each conflict one by one and helped me to understand the logic behind each troubleshooting that we have done throughout the development period.

Things I have learned throughout the semester:

Working on this project indeed was a great experience overall. I learned about the Unity Engine and the C# coding language. My main focus was to produce a product that I can modify in the future as I continue my research with Unity Engine. This culmination project should reflect my ideas and skills that I have acquired and practiced throughout the journey.



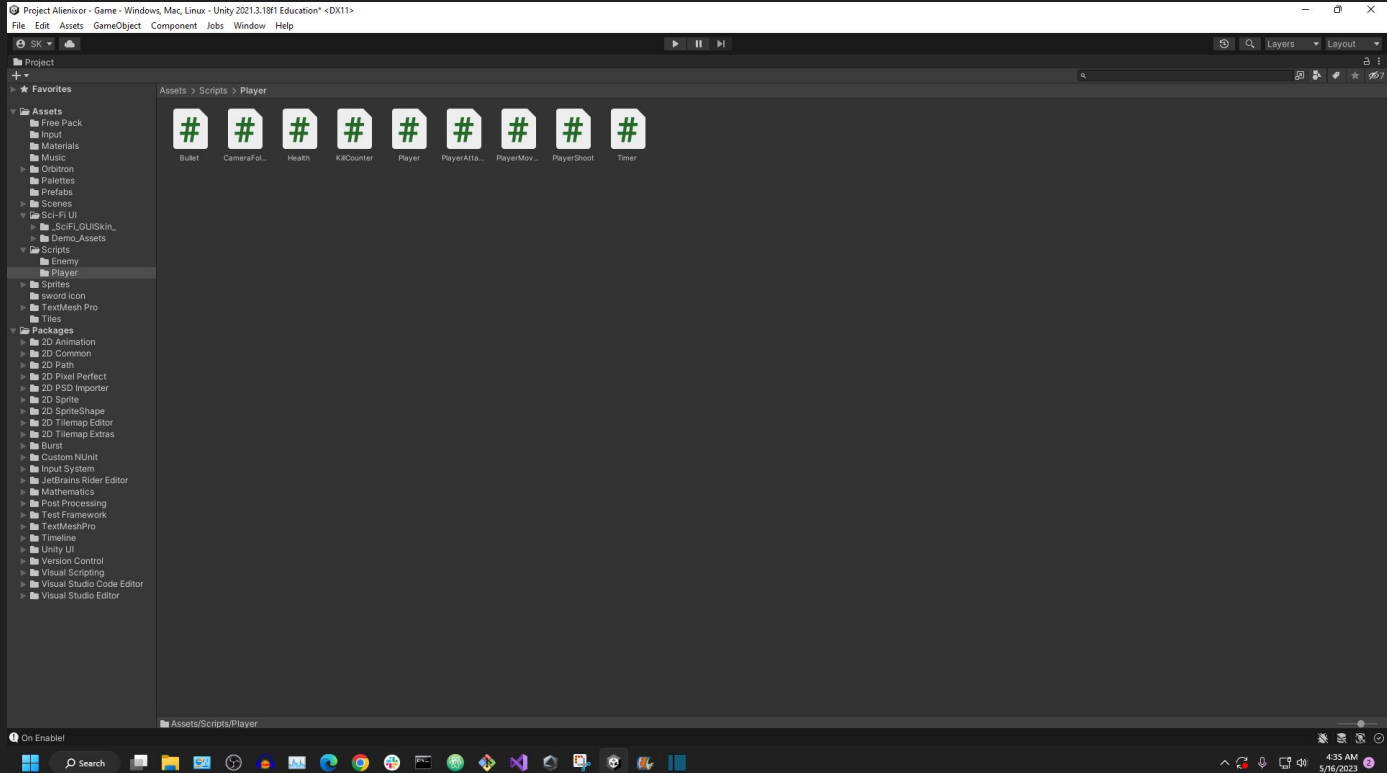
## Working with C# Scripts:

For this unity project I have created a total of 26 C# scripts that are handling all the basic and complex in-game mechanics.

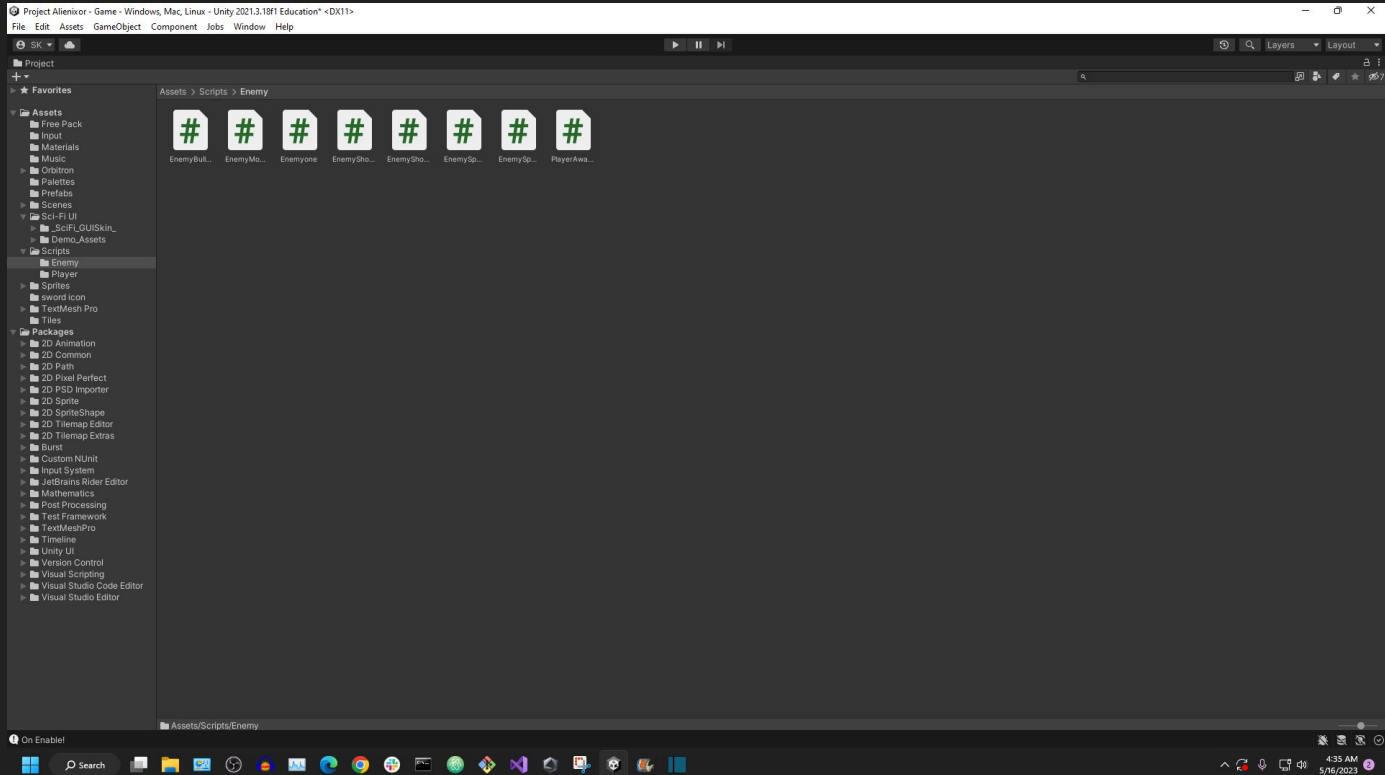
I decided to keep all my scripts well organized in specific folders for easy access.

- The Player folder contains a total of 9 C# scripts.
- The Enemy folder contains a total of 8 C# scripts.
- And 9 more additional scripts to handle the in-game features.

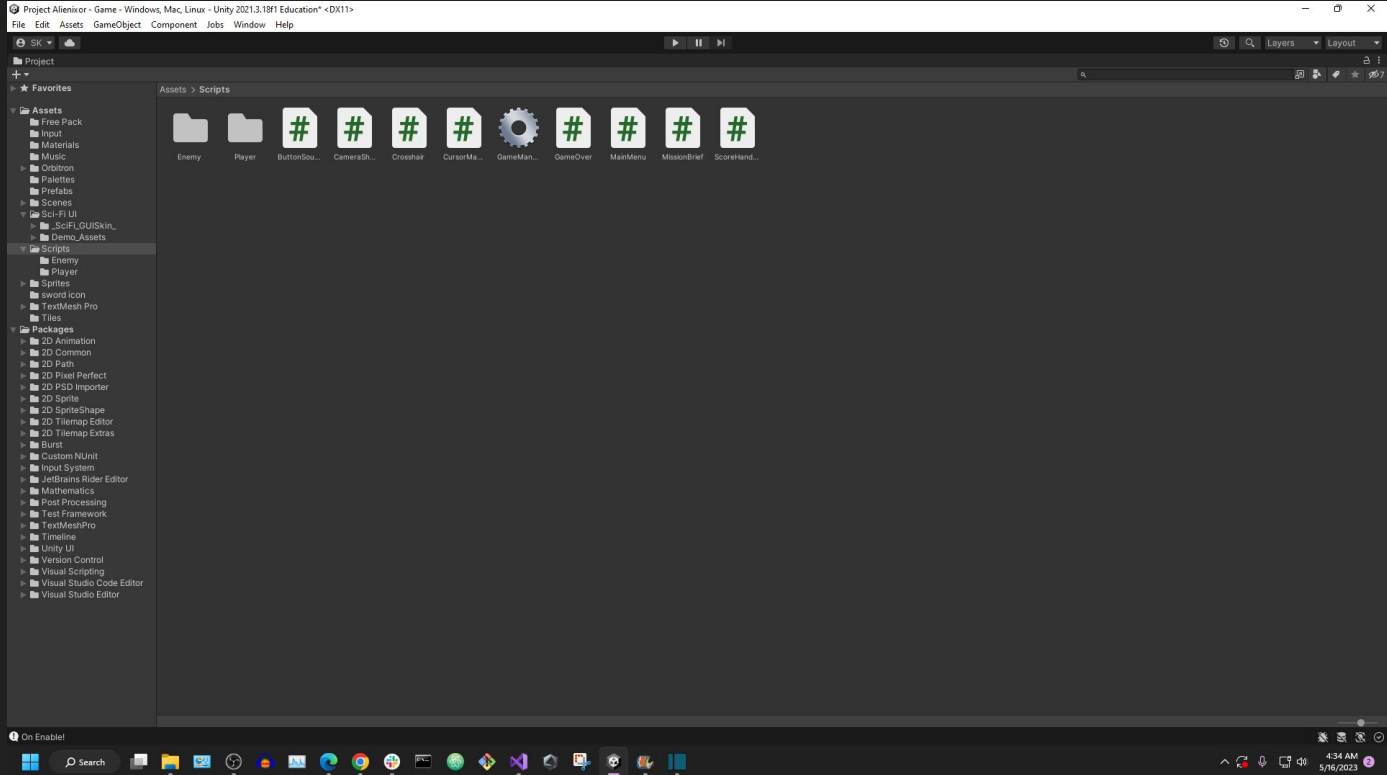
# The Player Scripts:



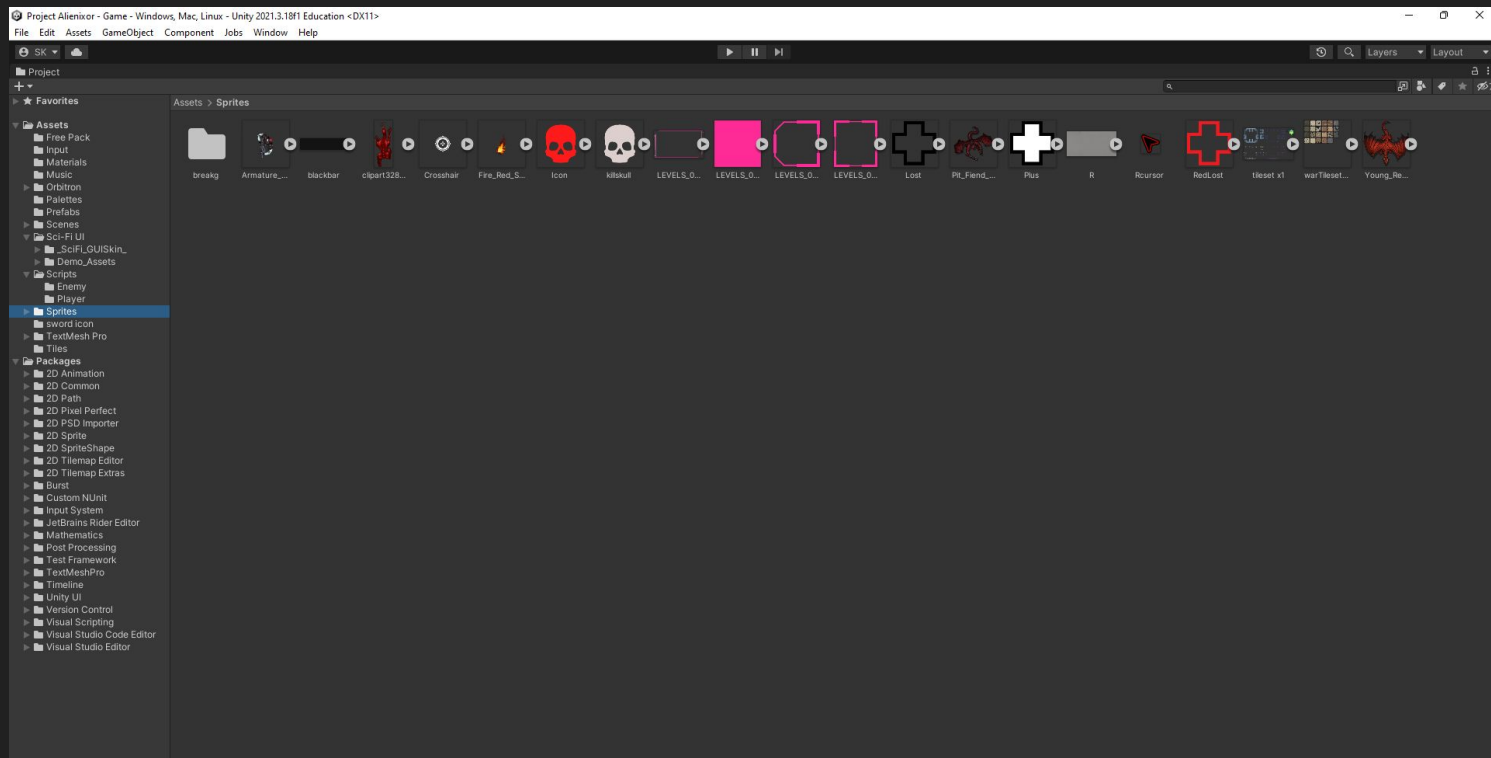
# The Enemy Scripts:



# Additional Scripts:



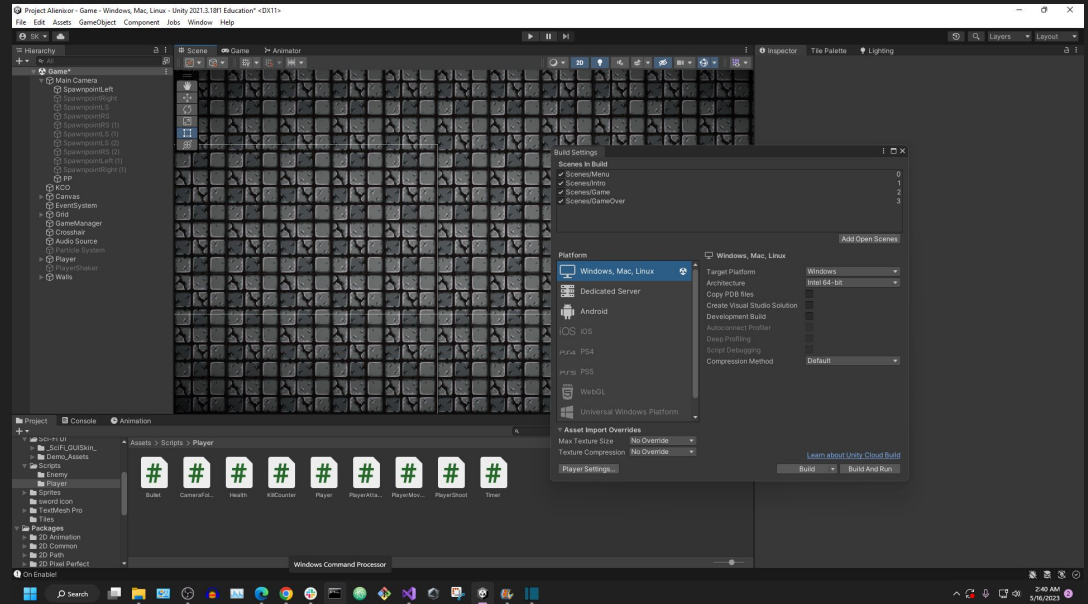
# Assets:



# Unity Scenes setup:

There will be a total of 4 Scenes in the final version.

1. The Menu Scene.
2. The Intro Scene.
3. The Game Scene.
4. The Game Over Scene.



# Culmination Project

A Unity Based 2D Shooter Game

**Shaian Khan**

Emerging Media Technology, NYCCT, Brooklyn New York  
11201

## Introduction

I am pursuing my Bachelor's degree at City Tech. My major is Emerging Media Technology. In my time at City Tech, I have learned about experimental game design and development. I have worked on several game design projects in the Technical Production course. My aim is when I complete my graduation I would like to get a job as a game designer. But I feel I don't have enough practical experience on the field. That is why for my culmination project, I would like to use my skills to the test by acting as a lead game designer for my own solo game project on Unity.

This is going to be a 2D platformer shooting game. The game is about an agent and his goal is to save the planet from the evil alien invasion. As a lead game designer I will be able to work on the budgeting, storyboard, management, in-game assets, artstyle, gameplay mechanics and coding. This will give a real-time experience as a game designer since I will be working with a technical advisor throughout this semester.

## Materials & Methods

- I will be working on Unity engine.
- The project will be 2D formatted.
- Working on C# scripts for the in-game mechanics.
- Using visual studio to write the codes.
- Collected copyright free 2D sprites from open sources.
- Using 2D Unity tilemap editor for creating the level.

Estimated Budget			
By Shaian Khan			
ITEMS	QUANTITY	UNIT COST	COST
Lensovo PC	2	\$800.00	\$1,600.00
Unity Software			Free
Additional Asset Contents			\$1,000.00
Game Development Cost			\$2,000.00
Treat for the Team			\$400.00
		<b>Material Total:</b>	<b>\$5,000</b>
		<b>10% Hardware Estimate:</b>	<b>\$500</b>
		<b>Subtotal :</b>	<b>\$5,500</b>
		<b>10% Contingency:</b>	<b>\$550</b>
		<b>Total :</b>	<b>\$6,050</b>



## Conclusion

My academic major is Emerging Media Technology and my concentration is Game Design and Interactive Media. If I have to choose a direction for a career, I would say I am quite interested in finding a career opportunity in the media industry. My choices are filmmaking, acting, video technology and game/content design projects. I also enjoy working with coding and programming related projects but sometimes I feel a bit overwhelmed with this. So, I want to keep the programming related career interests as an optional choice.

This culmination project helped me to enhance my creative skills and let me build the entire project from scratch on my own. I believe that I am very confident about my creative skills that I learned throughout the production period. And I am looking forward to finding a related job or an opportunity in the media industry where I can express and enhance my creative skills to develop my career goals.

## Project Deliverables

For the culmination project I will be producing the following list of things by the end of the semester.

- The game design concept.
- The storyboard for the game.
- Assets and materials.
- Development plan.
- Schedule.
- Research notes.
- Alpha prototype.
- Documentation of the development process.
- Poster.
- OpenLab Portfolio.

## Culmination Project

Shaian Khan		Project Start:	Wed, 2/8/2023	
		Display Week:	30	
task	DESCRIPTION	PROGRESS	START	END
Pre-Production Plan				
Task 1	Day One Meeting with Advisor		2/8/23	2/8/23
Task 2	Budgeting/technical setup		2/8/23	2/15/23
Task 3	Create a new project on unity		2/9/23	2/18/23
Task 4	Do research on unity		2/11/23	2/28/23
Task 5	Start building the game		2/11/23	3/18/23
Production Plan				
Task 1	Second Meeting with advisor		3/18/23	3/18/23
Task 2	Start working on the second phase		3/20/23	3/25/23
Task 3	Find the in-game assets		3/18/23	3/22/23
Task 4	Incorporate the in-game storyline		3/22/23	4/21/23
Task 5	extended days (Optional)		4/22/23	4/28/23
Post-Production Plan				
Task 1	Final meeting with advisor		4/28/23	4/28/23
Task 2	background music research		4/20/23	4/25/23
Task 3	Run troubleshooting		4/28/23	4/30/23
Task 4	Final development stage		5/1/23	5/8/23
Task 5	Final week & Presentation		5/8/23	5/16/23

# Project Alienixor Official Demo







Project Alienixor Official Download Link:

<https://github.com/Alam1998/ProjectAlienixor.git>

My Portfolio Link:

[Shaian Khan's ePortfolio – A City Tech OpenLab ePortfolio \(cuny.edu\)](#)

Thank You for Your Time

