IPL 301
Learning Contract

Student name: **Max Harris**   Project: **Steam Eagles**
In the space below, briefly describe the activities, duties, or projects involved in this project:
Design, Planning, Coordinating, and Implementing the Steam Eagles game.
Communicating with teammates and platytesters.

Field Supervisor Signature:	Date: 2/6/2023
UIS Supervisor Signature:	Date: 1/31/2023
Student Signature:	Date: 1/31/2023

Category	What is your goal?
Theory-Practice	I want to understand the theory of parallel programming and how it applies to game mecahnics and visual effects programming
	I want to gain a better understanding of realtime fluid simulations and the techniques used to make fluids as interactive as possible

What willl you do to achieve this goal?	Who/What will help you achieve this goal?
I will take notes on .NET multi-threading libraries, as well as the high-level parallel programming task API.	Udemy courses on C# Task parallel Library,Github (example projects)
I will also look at GPU based parallel processing solutions, particular the use of compute shaders to perform general processsing on the GPU.	
I will attempt to build a physically inspired gas simulation that runs on the CPU so that it can interact with gameplay elements (must iinteract with gameplay elements, not just a purely graphics based simulation, as that problem has been solved for the most part)	

How will you evaluate the success of this goal?
I should ble able to explain the theory behind paralllel programming in my final assesment and be able to explain how it is tied to theory behind fluid simulations
I should be able to program a multithreaded system that functions in a real-world development setting
Analyze feedback from my supervisor in my final assessment.

Category	What is your goal?
Career-Education	I want to learn how game development feels in the real world, and primarily I want to know how people actually finish games.
	I want to improve my game development methodologies and learn how to integrate them with my software development methodologies

What will you do to achieve this goal?	Who/What will help you achieve this goal?
Over the course, I will try to head a team of developers of 3-5 developers in attempt to produce a completed game demo at the end of the course	Other developers who are willing to work with me
I will use task tracking software to manage progress, focusing on fast iteration cycles and task prioritization	Codecks (task tracking),Obsidian (reflections)
I will reflect on tasks as I complete them, analyzing not only how the task went but also if it is the proper task	
after completion of tasks I will reflect on the result of the task and how that result will impact the future direction	

How will you evaluate the success of this goal?

In the final assessment, I should discuss the improved techniques and game development methodologies. Ideally I should be able take those lessons and identify how they apply to projects at different stages, scales and different team sizes

I should compare the work and outcome of the original game jam and assess how my development methodologies have improved.

If I am able to complete and publish versions of the game throughout the course I can reflect on what I did to get that version published. I can explain in my final assessment how my development methodolgy has improved and why those improvement will lead to further successes in the future.

Category	What is your goal?
Self-Improvement	I want to improve my ability to focus, or more clearly I want to improve my ability to recover from distractions

What willl you do to achieve this goal?	Who/What will help you achieve this goal?
I will always make sure I have a short and medium term goal set-out during work, and each day verify that the work I did aligns with those goals	I will use software that tracks and logs my work and switching tasks. That coupled with feedback from my team members on how often I get distracted. I shou the support of my other teammates to point out wher on a tangent.
I will periodically do reflections as a net to catch myself when get distracted. improving my abillity to recover from a distraction and return to the priority task	

How will you evaluate the success of this goal?

At the end of the course, I should have obtained new insights into how my brain works and developed a better understand how to focus and get work done.

This should be evaluated by analyzing my journals and discussing the insights gained from them in the final assessment