## **Artist Statement**

An exploration in the Co-existence of various life forms, the interaction between them and the tribulations that may occur within the colony or from external sources. "Critter Colony" is a game which explores these concepts within artificial intelligent life forms.

The user will generate various life forms the keyboard, the user is allowed a maximum of 16 total to be created. Once the user has created all 16 or less if they prefer, they can begin managing the lives with their character.

The task of your character is to ensure the survival of the colony, you can carry each life form around to ensure procreation or safety.

Each life form will have their respective abilities and will exist as a colony in an attempt to co-exist among each other. Much like real life-life forms, these AI will encounter scenarios which threaten their existence, drain their life, or in positive cases, create new life forms. Included in this game are three life forms, a user character and a virus. The three life forms are large, regular and small. The large ones ensure the defense against the viruses, though they do require constant nutrition. They get their nutrition from other life forms. Regular life forms ensure the existence of the life forms, when two are matched, they are able to create other life forms, but just once. There is also a small chance for mutation, where a small or large life form is created. Small life forms are responsible for keeping the large life forms well fed, this ensures their survival, if there are no small life forms on the screen then the large ones will eat the regular ones. The virus comes in at random times during the playthrough, and will target the regular life forms in an attempt to destroy the colony.

Using the chapters from The Nature of Code, specifically Oscillation and Forces for movement, Particle Systems and Autonomous Agents for the Al creation aspect, I created autonomous moving life forms which interact with one another. To give the user a sense of immersion, I have incorporated a character that facilitates managing the colony.

The purpose of the game is to create basic Al logic and use this logic among different objects, AKA the life forms. With the Al created, I will attempt to create sound generated Al and see how long these Al can exist before the colony dying out.