# CS426 Game project proposal

Team name: Chaos Games
Team members: Joseph Durel
Game name: Star (working)
Proposed work:

1. Provide an overview of your game (give a short description about the game, i.e., game plot, objective, etc.):
   You play as a start-shaped organism drifting through a liquid environment. You must eat, build up your 'nest' and defend against predators to reach the next stage of evolution.

2. What are the characters and their resources (e.g., health points, number of characters, weapons, etc.) in the game? What are the behaviors of the characters and how do they interact with each other and their resources?
   The player can collect organic material for various purposes. To consume or pick up resources, the player attacks them. They also have an attack charge meter to use against enemies. They can perform simple attacks without it, but a full (or partially full) attack meter allows them to charge their attacks with electricity. All creatures in the game move around like single-celled organisms in water.

3. What types of conflicts do you have in the game?
   The player must collect material to improve their nest. To collect this material they must venture out into the surrounding areas which are filled with predators. They can eat to heal themselves and further their evolution, but their character consumes the same building material that is needed for the nest.

4. Provide sketches/drawings to show how your game will be played. (Attach to this page)
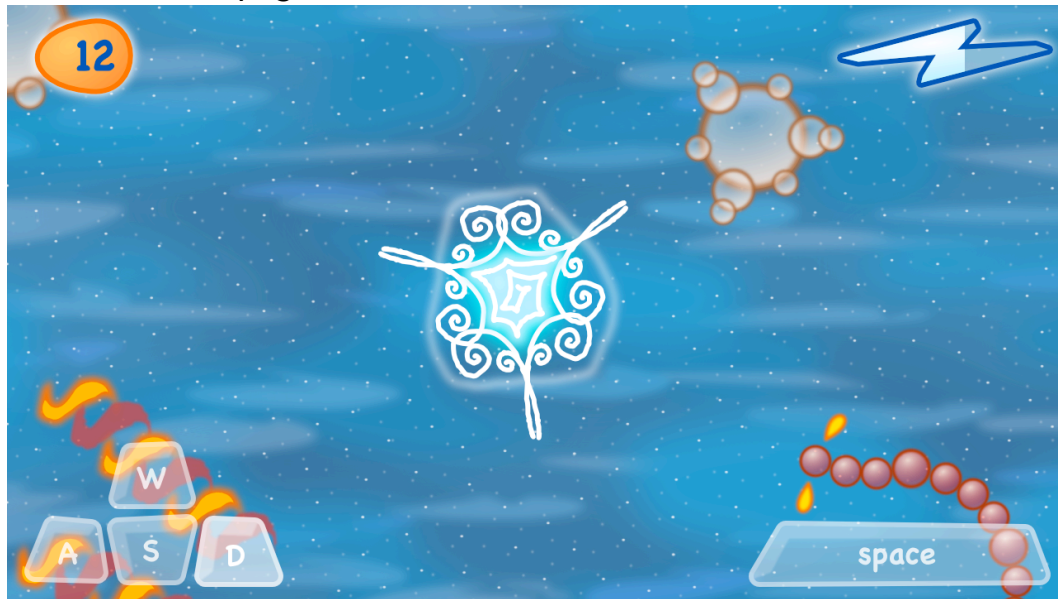
5. What is the main language you will use to implement the game?
The game engine will be implemented in C++ (with some C), as well as having a simple scripting language of its own.

6. What tools/libraries you will use?
My engine will use OpenGL for rendering and SDL for window management & system integration.

7. What types of user interface will you provide/use?
The game will have a main menu that allows the player to start a new game from one of three unlockable levels. There will be an in-game pause menu. The controls are simple enough that I will have them displayed in the HUD at all times.
I may enable saving the game from the pause menu (as well as loading saved games) later in development. However the game is simple enough it may not warrant save games.

8. What are the milestones you plan to have? Please give a short description and an expected finish time each for milestone.
By the fourth week I expect to have the engine fully completed. By the sixth week I plan to have much of the basic game code implemented, such as movement and the menus. By the seventh week I plan to have added enemies and other entities, and have the first level complete by the eighth week. The rest

of the semester will be spent creating the other two levels, as well as fixing bugs.

9. What are the difficulties/challenges do you foresee? How do you plan to address them?
    I may have some slight difficulty implementing sound for two reasons. Firstly, I have never used the SDL sound mixer. Secondly, while I have some small experience with sound design, I don't have the necessary skill to create interesting music.

10. How would you divide the tasks among your team members (if more than one)?

11. Why do you think your game is interesting/exciting?
    My game by itself is not particularly interesting; it will have to sell itself on simplicity and art direction. My main purpose is to use the game as a proof-of-concept for my game engine, specifically the scripting language.

12. Do you model your game after an existing game? If so, what is it?
    This game derives some inspiration from the cellular stage of Spore.