Game Description:

The story of our game revolves around our player character, Hirsch—the last guardian deer spirit. Evil spirits have drained the sacred World Tree of its life essence and scattered them across the underworlds. Without the World Tree, the life of the land will fade and succumb to impenetrable darkness. As Hirsch, you must traverse deep into the infested dark caverns to collect the scattered life essences and safely return to the surface to revive the World Tree before eternal twilight engulfs the land.

Spawning at the entrance of the cave, Hirsch is required to collect all the scattered life essences to complete the game. Utilizing a grid-based cell and movement system, the game will feature a board that consists of cave walls, traps, wandering evil spirits, life essences, elusive life essences, and Hirsch himself. Walls are visible static environmental entities that block Hirsch and evil spirits from moving through or onto its location. Traps are visible static entities on the map that induces negative status effect and deducts HP to Hirsch when he stepped on it; Hirsch dies if HP goes to zero. Evil spirits are visible NPCs that endlessly search and chase after Hirsch, killing Hirsch upon contact. Life essences are visible static entities on the map that is collectible by Hirsch, if collected it also recovers some of Hirsch's lost HP. Elusive life essences, in addition to the properties of the normal version, spawn randomly on the map and serves as bonus rewards; only one elusive life essence may be on the map at any one time and would quickly disappear if left uncollected. Hirsch can only move up, down, left, and right onto adjacent cells per movement command and if the new cell is unobstructed.

Design Architecture:

Utilizing quasi-composite structure, classes are designed around a hierarchy of global to local responsibility and awareness; with the game engine having the highest level of awareness and the individual entities having the least. With little exception, classes communicate and interact with those who are within one tier of responsibility and awareness, this keeps the interactions traceable and the code maintainable. In general, each class facilitates the interactions of local and lower-level entities while passing the necessary information upwards in the hierarchy of awareness.

Development Plan:

Our initial goal will be to construct a working prototype based on the core requirements of our game, with a strong emphasis on a stable and performant game engine backend. We will be mainly working from backend to frontend; integration of graphic and audio assets will be the final phase of our prototype development. If time allows, we plan to add more content that would deepen the gameplay experience and expand the lore via larger maps, breakable barriers, saving and loading, combat, skills, dialogues, etc.