Game

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.

As the player, you control Hirsch and are tasked to navigate the dangerous cavern and collect all six spirit essences and then exit the map. As you navigate the cavern, you must avoid the evil spirits and traps.

Video Demo

https://youtu.be/GGEwcYmPmtA

Design

We feel that we have fully delivered our initial core gameplay goals. Core gameplay elements like chasing enemies, score tracking, and movement all matched our initial design. As discussed in our phase 1's development plan, our development goal was to develop a modular game platform which features can be added easily over time.

Although the core gameplay remained the same, alterations were made to the backend for improved efficiency and simplicity especially in the areas of inter-object communications. Some of these changes include the removal of certain communication overheads and third-party class dependencies. Through the various backend alterations, the clear separation of objects into hierarchy was one thing that remained strictly the same; as discussed in phase 1's report, the splitting of object responsibilities based on scope made our code easily manageable and traceable.

Upon completing the core gameplay elements, we were able to add additional features on top of our game to further enhance the gameplay experience; many of these were unanticipated in our initial development. For example, it was quickly realized that running A* Search on the evil spirits enemy objects was overly complicated and inevitably made the game far too difficult; to compensate, we utilized a simple movement heuristic

and gave the enemy objects a skill to periodically walk through walls. We felt that this new gameplay mechanism was able to achieve the perfect level of difficulty for the player while being easy to develop and balance.

Overall

One of the most important lessons we've learned is the importance of communication. By clearly conveying our goals and plan, we were able to smoothly progress through the development process. Another lesson was the importance of mutual learning, we were able to learn from the different skills and expertises possessed by each member. By combining our own collective knowledge and experience, we, ultimately, enhanced our own personal knowledge and experience. Our experience in this class has helped us develop and enhance our skills in the areas of Java and object-oriented programming. Additionally, we also were able to learn more specific skills like building projects with Maven and testing with JUnit.