Lithos

Group 22 - Aravind Achanta, Yonathon Gordon, Naga Kameswari Spoorthi Pendyala, Sai Priya Jyothula, Sumanth Reddy Pandugula, Vakkalanka V S S Dilip Raju

Lithos is an interactive multiplayer strategy game in which the user plays the role of a tribal leader who tries to overcome various obstacles in Prehistoric Age. The game evolves as the leader takes care of his tribe by making decisions that help them find food, shelter and advance technologically through various levels that are an accurate reflection of prehistoric eras. Although there are many successful games designed for high school students in the genres of strategy and education, there is an absence of games that are both engaging and informative. **Lithos** is both – it provides the user with knowledge about Prehistory in an exciting gaming environment without sacrificing either of entertainment or education for the sake of the other.

At the beginning of the game, the player leads an uncivilized tribe with a primitive mindset that is solely focused on survival. The game ends with the tribe successfully replicating the events of prehistoric age and finally settling down as a sophisticated civilization. The timeline of Prehistory is evenly spread as levels starting from Paleolithic Age, continuing through Iron Age and finally emerging as a civilization. Write something about the targeted users as well.

The overall concept of the game is that the player has to employ strategies to deal with various situations and crises like hunger, climatic conditions that force them to find a shelter, wildlife, relations with nearby tribes and progress technologically (like discovering fire or inventing the wheel) according to the chronology of Prehistory.

At the beginning of every level, the specific goals that are related to the particular era would be mentioned which need to be met. The goals may consist of tribe survival, developing skills, building houses, making implements and technological advances depending on the era. The player will be guided through the game with various hints and corrections that might keep popping up when he/she deviates from the intended goals of the level or takes more time to achieve the goals than the time specified. The feature that adds on to the educational value of the game is that, the player has to answer some questions at the end of the current level to unlock the next level.

The player continuously monitors the meters that indicate the levels of food and safety and takes necessary actions as the levels deplete. For example, when the food meter starts coming down, the player sends some of the tribe members to gather food. The rate at which the food meter goes up depends on the kind of food they gather in the search. The food meter is a function of time and safety of the area where they are currently halting. The tribe needs to hunt for meat, so if the safety meter shows green, they hunt and eat well. But if the safety meter goes red, they need to immediately retreat to a safer place and satisfy themselves with any random food that they can

find. If the player isn't paying attention to the safety, he/she might end up dead. Basically, the player has to decide which option to choose in order to stay alive.

The competitiveness of the game is ensured as the user competes against the computer. The Artificial Intelligence continuously engages the user by posing threats whenever there is a period of safety. That means, when there is an abundance of food in some safe zone, the AI throws another complexity at the tribe such as a climatic change. Also, as the game develops and the tribe evolves and acquires a skill set, the system (player match making app) searches for other tribes lead by some other players with compatible skill set. Then these tribes can go against each other or collaborate with each other to go against some other tribe, essentially enabling the game to go into multiplayer mode.

