Assignment 3:

3D Clone of Marble Madness

COSC3072|COSC3073 - Game Studio 1

Lecturer: Kapil Dev

Tutorial: Tran Quang Nhat

Group 2 – SGS

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My primary responsibility in this project was level design, which encompassed several interconnected tasks: researching methods for building a tileable world, designing the individual levels, creating obstacles and other interactive movement objects, and implementing the death, checkpoint, and goal systems. In addition to technical tasks, I also took on the role of task and progress manager, maintaining the project timeline, tracking weekly progress, and ensuring we met the final submission deadline. Due to the heavy workload at the end of the semester, team synchronization was limited to weekly check-ins, during which I reviewed progress, planned upcoming tasks, and performed light quality control to ensure the final product adhered to assignment requirements.

Overall, I estimate that my contribution accounted for approximately one-third of the total project workload. Although I assumed a managerial role, my support to teammates was primarily limited to planning and scheduling rather than day-to-day assistance, given time constraints. For level design, I was unable to complete all levels independently and therefore collaborated with Huy, who provided valuable support in finalizing one of the stages.

One key challenge was the lack of time for extensive research and system planning, especially compared to our previous assignment. As a result, we prioritized delivering a fully playable final product over implementing more advanced mechanics. For example, while the Jolt physics engine provided robust features, we were unable to fully exploit them—some mechanics such as bouncing interactions were cut due to the additional implementation time required. Nonetheless, the team collectively acknowledged these constraints and made deliberate compromises, focusing instead on ensuring that the game was complete, functional, and met the assignment's expectations.