Cosmonarium is a turn-based role-playing game in the style of 240p JRPGs of the early 1990s (such as Earthbound or Final Fantasy VI). Employing themes from science fiction and dark humor, the narrative takes place within a museum, a lonely structure drifting through space on a asteroid during the final days of the known universe. Many of the universe's surviving life forms remain preserved within the museum's halls, anaesthetized while experiencing simulations of their past lives and unaware of their imminent demise. The story begins as a young boy awakens from his stupor and comes face-to-face with his seemingly hopeless plight. Along with a diverse cast of characters, he must uncover why the other exhibits have also begun to reawaken, confront the strange parasitic threat ravaging them, and find hope amidst the growing darkness. Split between exploration and combat modes, *Cosmonarium* will likely appeal to video game hobbyists who enjoy quirky indie RPGs.

The project will be broken down into several components: game development and programming, pixel art and design, dialogue and script writing, and music direction. *Cosmonarium* will be built using Godot (ver. 3.2.2), an open-source video game development engine. Scripts will be written primarily in GDScript, a dynamically-typed scripting language similar to Python. Programs may also be written in native C++ as needed. Pixel art will be created in Pro Motion NG and Pyxel Edit. The written story will be fleshed out over time, eventually being integrated into Godot by utilizing an application called Metalogue. Music will be composed and edited primarily in FL Studio and Famitracker. As a side project, a pixelated wave spectrum generator will be built to produce unique visuals for the game's combat phase. Besides the use of the Godot Engine, however, auxiliary design software may shift over the course of the development process to streamline overall workflow.

The team members working on *Cosmonarium* have the skill sets and determination to see the project through to completion. The ability to quickly learn and understand new programming languages and frameworks (e.g. GDScript and the Godot Engine) was acquired in CMSI 386: Programming Languages. Proper data organization and modeling was learned in CMSI 281: Data Structures. Additionally, members on the project have taken courses more explicitly aimed towards the project's success. Tim has taken CMSI 498: Game Development and ANIM 250/450: Intro/Advanced Interaction Design**.** Meanwhile, Joe has taken CMSI 375: Game Design, and RECA 398: Video Game Sound. Luis has also taken CMSI 375: Game Design, CMSI 498: Game Development and ANIM 250: Intro Interaction Design. Therefore, the creation of *Cosmonarium* will certainly offer a challenging but manageable software development experience.

Due to the complexity of the envisioned game, it will act as an extended project for both CMSI 401 and 402. At its completion, *Cosmonarium* will serve as a testament to the team's

passion for programming and video games, and will entertain classmates, friends, and instructors at LMU, and individuals in the larger gaming community in the coming years.