

Software Architecture Design Considerations

Our game design project uses an architecture that most closely resembles a master-slave architecture. Within our design, we have one “Main” scene which is responsible for the primary game loop, as well as calling all relevant functions of other game objects. All game objects (player, asteroids, projectiles, etc.) are created within the scope of this Main scene, and therefore respond to any method calls that they receive during the main game loop. To that end, each game object is distinct and independent, and is responsible for handling everything related to itself, including movement, controls/input handling, etc. Signals emitted by these game objects are received by the Main scene, providing responses to requested actions.