

CSC413[01] – Term Project – Design Documents

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Wingman

1. JApplet
 - a. Game – creates an instance of a game, calling an initializer class
 - i. HUD – displays user score, health, and lives
 - ii. Bullet – creates a bullet object. Leaves player or enemy, aimed at target
 - iii. Explosion – animation for bullet hits and unit explosions
 - iv. Island – displays island object on background
 - v. Unit – creates a game unit, with set power, and places it on the canvas at requested location. Unit is reset upon destruction.
 1. <OBSERVER> Player – user controlled airplane, can collide with other units
 2. Boss – endgame unit with greater power and health
 3. Weakling – pawn style enemy which shoots in a straight line and has little health
2. Wingman – the game initializer class. Initializes all game objects
3. <OBSERVABLE> GameEvents – watches for user input and other events
4. Keycontrol – defines user controls for Player object
5. Media
 - a. Sound – initializer and container class for background music and sound effects

Tanks

1. JApplet
 - a. Game - creates an instance of a game, calling an initializer class
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 1. <OBSERVER> Player – user tank, collision event is different, does not cause destruction
 2. Enemy – pawn style enemy which moves randomly across map and shoots in the players direction
 - v. Wall – creates a wall object and places it on canvas. Can be set to destructible and indestructible. If destructible, has hit count till wall breaks.
 - b. Tanx Media
 - i. Sound – initializer and container class for background music and sound effects
 - c. KeyControl– defines user controls for Player object, not the same as Wingman due to different types of movement
 - d. MiniMap – smaller version of game map, allows user to track location of their and enemy units
 - e. <OBSERVABLE> GameEvents – watches for user input and other events such as minimap updates

Tank Game: UML

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