

Keyboard & Mouse Control:

Arrow keys: up will move the player's ship foreword in the direction it is facing. Left & right will cause the ship to move foreword and turn around a point to the left or right of the ship, respectively.

B key will enqueue a fighter in the player carrier build queue.

D key will deploy all docked fighter (see Bug/Limitation #1)

R key will recall all fighters & dock them with the player carrier.

A left click on any of the player's ships will select that ship & allow the health bar to be displayed. Left-drag will drag a selection box over an area & will select all player-owned ships it intersects with.

A right click in the game world sets the destination for all selected ships.

Known Bugs & Limitations:

- 1 Ship docking/deploying will intermittently deploy an incorrect number of fighters. I believe it is related somehow to ship destruction (deactivation), but I was never able to track down the exact problem.
- 2 During development the player's ability to auto-target & fire at other ships was accidentally disable & never corrected. The player's *should* be able to target enemy ships.
- 3 The gray market that appears during asteroid harvesting intermittently stops appearing for the same asteroid if the ship or asteroid move out of range. No cause was ever determined.
- 4 Occasionally a group of fighters will reacquire a previously-destroyed fighter & begin moving towards it as if the destroyed fighter was within range (usually not the case). Destroyed fighters exist in the game world at their last non-expired position in a deactivated state. Fighters *should not* be able to acquire deactivated targets.
- 5 Carriers stop immediately after being issued a destination via right clicking in the game world. This is unintentional & a consequence of the design of the keyboard key commands.
- 6 The B key on the keyboard has no delay associated with issuing the build command. The lack of any time between build command allows players to hold down the key & rapidly enqueue many fighter.

Data Structure Design:

Individual Ships & asteroids inherit from UWB_SceneNode, as do the CEffects & CObjects classes. CObjects manages the creation of ships & asteroids. CEffects

manages creation of all trails, background images, drag-select boxes & all other graphical objects.

The model contains one scene node that contains the entire scene. That node contains one child for game objects & 2 children for layered effects.