Rules

* Number of game turns: 25 -35
* Initial energy: 3000
* Initial enemy energy: 200
* Maximum number of torpedoes: 10
* Shield energy starts at 0
* Warp speeds can't exceed 8.1
* Victory conditions:
* All enemy ships destroyed before time runs out. Victory for player.
* Enemy ships remain after time runs out. Loss for player.
* Friendly ship is destroyed. Loss for player.

How to Play

* Commands are:
* navigation (Sector movement--point at destination with mouse and left click. Quadrant movement--point and left click on mini-map.)
* Movement costs ten units of energy plus one unit of energy per sector travelled .
* If movement path passes through a sector with a:
* star--ship takes random damage--.3 probability of 10-100 damage.
* space station--no effect unless stopping in sector, then ship autodocks.
* enemy ship--both ships take random damage--.1 probability of (10 - 50) damage.
* If not enough energy for movement, energy--if available--will be drained from the shields to complete the movement.
* long range scan (Button: click button to reveal enemy ships, stars, and space stations in adjacent quadrants)
* set energy weapon energy level. (Slider. Move slider to increase or decrease power. Total energy indicator decreases appropriately.)
* fire energy weapons (Button: click button. All enemy ships in quadrant are attacked.)
* Energy weapon firing algorithm.
* Divide the power set for the energy weapon by the number of enemy ships in the quadrant. This is the energy (e1) used against each enemy ship.
* Use the formula-- hit\_energy = e1 / (random(2 to 3) \* (square\_root(delta\_row^2 + delta\_column^2)) where delta\_row and delta\_column are the numbers of sector rows (or columns) between the enemy and friendly ship.
* if hit\_energy is less than or equal to .15 \* remaining enemy power, no damage is done.
* otherwise, enemy power = enemy power - hit\_energy.
* If enemy power is less than or equal to zero, then the enemy is destroyed.
* fire missle weapons (Button: click button and then point at target and left click)
* if movement path of a missle passes through a sector with a:
* star--.9 probability of being destroyed.
* space station--.1 probability of destroying space station instead of original target.
* enemy ship--.5 probability of attacking enemy ship instead of original target.
* Missles cost two units of energy when fired.
* Missle weapon firing algorithm.
* Check for interfering stars or space stations and adjust as required.
* Probability of kill is D/D^2, where D is the distance between firing ship and the target. (We may need to modify this formula to improve the performance of the missles.)
* control shields (Slider: Move slider to increase or decrease power. Slider also indicates shield power. Total energy indicator decreases appropriately. )
* damage control (Toggle: click to open or close damage control screen)
* computer reports (Toggle: click to open or close damage control screen)
* quit (Button: click to quit--with additional click required to confirm.)

How the Game Will Work

* randomly place friendly ship on the map.
* randomly place enemy ships on empty spot in each quadrant using the following probabilities:
* 2% chance quadrant will have 3 enemy ships
* 5% chance quadrant will have 2 enemy ships
* 20% chance quadrant will have 1 enemy ship
* otherwise, the quadrant contains no enemy ships
* randomly place space station in an empty spot in each quadrant using the following probabilities:
* 4% chance of 1 space station
* otherwise, the quadrant contains no space station
* If no space stations are generated, put a space station in the same quadrant as the friendly ship and increase the number of enemy ships by one--unless there are already 3 enemy ships in the quadrant. Then randomly replace the friendly ship.
* Damage (.05 probability of critical hit for each of the following systems when energy hitting friendly ship is greater than 20% of shield energy.):
* Long Range Scanners. If damaged, long range scan doesn't work. 3 - 10 turns to repair.
* Energy Weapon. If damaged, energy weapon doesn't work. 1-10 turns to repair.
* Missle Weapon. If damaged, can't fire missle. 1-5 turns to repair.
* Shields. If damaged, 50% of the shield energy is recovered for use elsewhere, but shield energy remains at 0 until repaired. 1-3 turns to repair.
* Warp Drive. If damaged, max speed is 0.9. 4-10 turns to repair.
* All repair times are cut by 1/3 to 1/2 when docked at the space station, except for shields which are immediately restored.
* Condition is "Green" unless:
* Current energy is less that 10% of initial energy (300), then condition is "Yellow".
* The quadrant has one or more enemy ships, then condition is "Red".
* If conditions for both "Yellow" and "Red" alert exists, then condition is "Red".
* When docked at a space station:
* Repairs are completed 2 to 3 times faster.
* Shields are immediately repaired, but set to zero (dropped to allow docking).
* Energy is immediately restored to initial value (3000).
* Missles are reloaded to maximum capacity (10).
* Enemy firing algorithm.
* Use the same formula as energy weapon hit-- hit\_energy = e1 / (random(2 to 3) \* (square\_root(delta\_row^2 + delta\_column^2)) where delta\_row and delta\_column are the numbers of sector rows (or columns) between the enemy and friendly ship and e1 is the energy of the enemy ship.
* If hit\_energy is greater than 20% of friendly ship's shields, calculate critical hit (see above).
* Friendly ship shields = shields - hit\_energy. If resulting friendly ship shields is less than or equal to zero, then friendly ship is destroyed and the game is over.