The Last Star Fighter

Final Project Proposal

November 13, 2008

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Description:

The purpose of the game is to destroy all other star fighters. User can choose between several different ship designs. The user must then navigate a pseudo realistic solar system to vanquish foes using an arsenal of super sweet lasers and totaling kicking missiles. In other words, blow up your enemies before they blow you up. Blow up more ships to increase your kill total and advance to higher levels of difficulty.   Higher levels include more enemies and a more difficult environment to navigate.

Hero Object:

The Hero object is a star fighter. User can choose between several different star fighters of differing mobility, shield power, and weapon strength. The user can control the star fighter by turning on and off the thruster and rotating the ship to the left or right. The user will also be able to fire the ships primary and secondary weapons to destroy their enemies.   A shield will protect the ship until the shield power for the ship reaches zero, at which point the ship will explode on the next hit. The shield will only be visible briefly after it takes damage.   Ship is subject to the gravitational pull of the planetary bodies.

User Controls for Hero Ship:

- Arrow Key Up: Forward thrust
- Arrow Key Down: Reverse thrust (¼ power of forward thrust)
- Arrow Key Left: Rotate Left
- Arrow Key Right: Rotate right
- Enter: Fire primary weapon
- Right Shift: Fire secondary weapon

Sample Ship design:
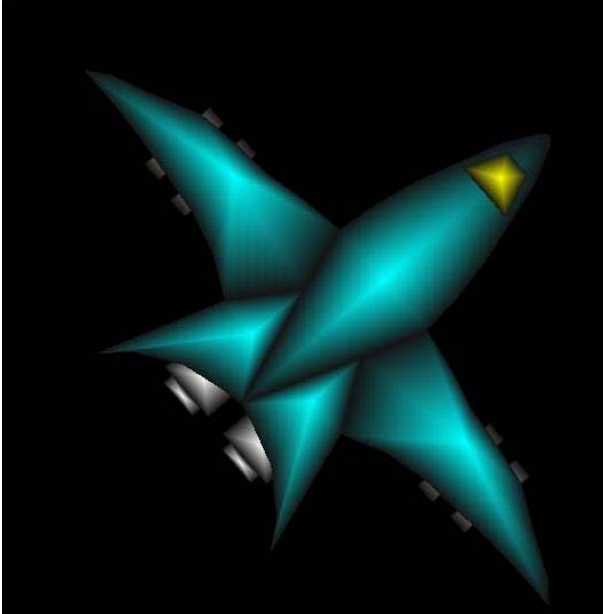
Supporting Objects:

Laser Blasts (primary weapon):

Small object which travels in one direction that is not effected by gravity and is destroyed when it hits either a planetary object, the border of the world, or a star fighter. Damages any star fighter it hits.

Missiles (secondary weapon):

Missile is affected by gravity and constantly alters its course to collide with enemy star fighter. Missile is destroyed when it hits a planetary object, the border of the world, or a star fighter. Severely damages any star fighter it hits.

Star:

Located in the center of the world, has a large gravitational force, releases solar flare objects (small yellow spheres) that will destroy any star ship they touch.

Black Hole:

Can be used in place of a Star, has an extremely large gravitational force, and no solar flares. Black Hole destroys any ship that crosses the event horizon.

Planets:

Planets orbit sun and have gravitational force. Ships will bounce off planets and damage their shields in the process.

Moons:

Moons orbit planets, have no gravitational force, and will damage ships if they bounce off them.

Levels of Difficulty:

Higher Kill totals increase the number of enemies the user faces at one time, and the difficulty of world navigation.

Simple or Pre-Defined Animation:

Continuous:

- Sun constantly spawns short lived solar flares in random directions.
- Planets have rotation.
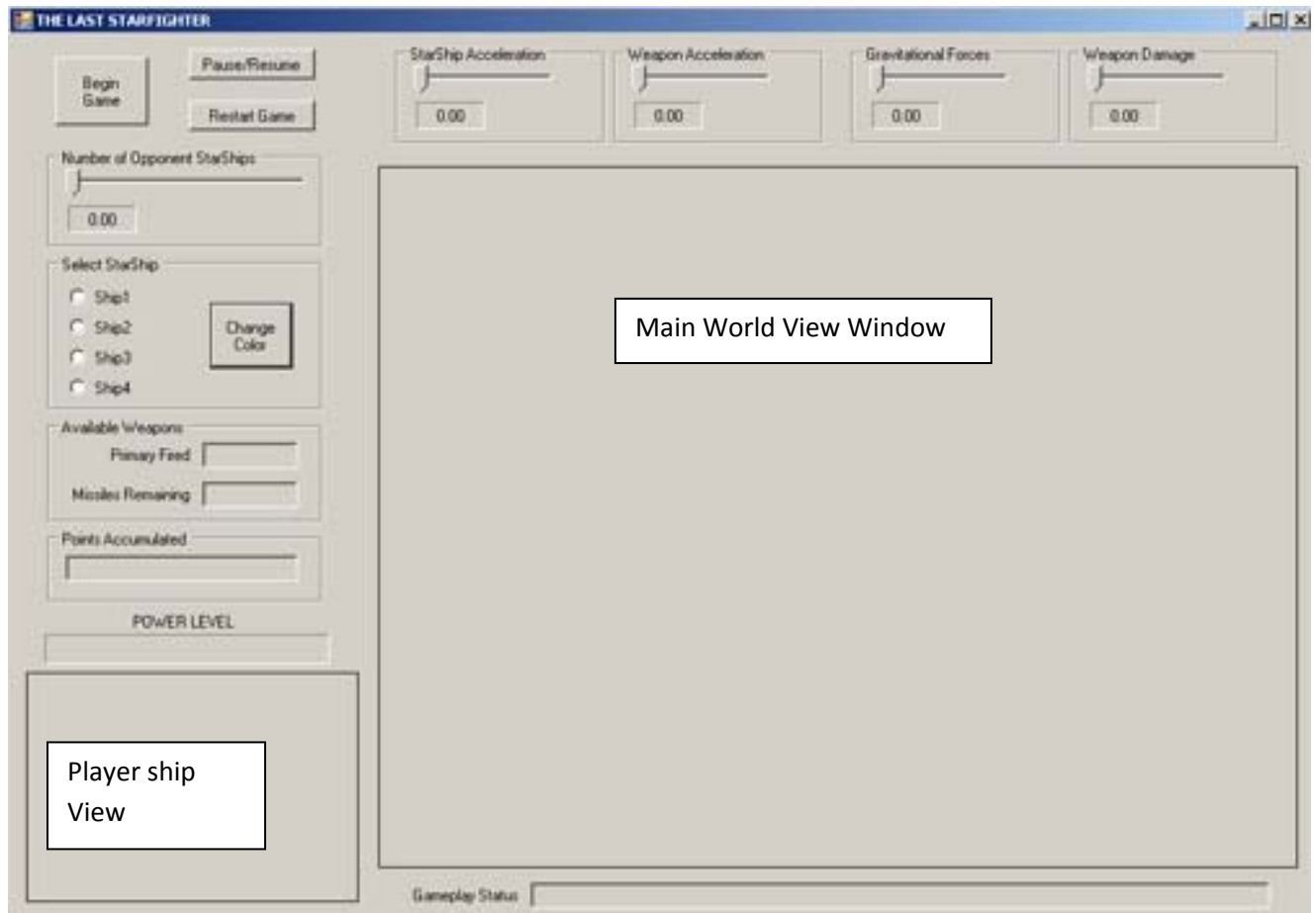
Pre-Defined Animation:

- Fire coming from the ships engine when thruster is on.
- Ship exploding animation.
- Missile exploding animation.

Audio:

Sound effects for the following events:

- Weapon fired
- Ship damaged
- Thruster on
- Ship explosion

Sample Layout of Graphical user interface:

GUI Content:

- Large main world view
- Smaller Player ship view
- Slider bars for changing various world settings
- Buttons to begin, pause/resume, and restart game play
- Starship selection radio buttons/dropdown menu, and color change
- Weapons echo displays timer for missile shot refresh
- Graphical representation for the power level of the starship
- Status bar for player notifications and world conditions
- Toggle for world wrapping or world expansion