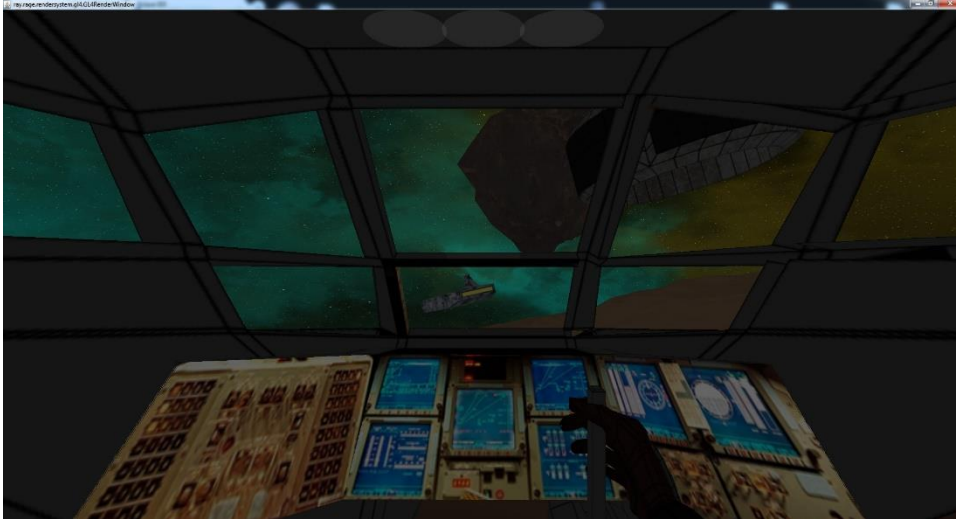


Raiders In Space

By Jon Knight and Martin Nivinski

1. Raiders in Space by Jon Knight and Martin Nivinski



2.

3. javac ris*.java to compile

to run ->

```
java -Dsun.java2d.d3d=false -Dsun.java2d.uiScale=1 ris.MyGame
```

<ip address of server> <forward port of server>

the server is compiled javac RageServer*.java

the server is ran with this (note you must know the ip address from the client end

```
java -Dsun.java2d.d3d=false -Dsun.java2d.uiScale=1 RageServer.NetworkingServer
```

<forwarded port of server>

4. Just keyboard or a single Gamepad, no special requirements

5. The player flies around the area. Shooting at enemy players. After being shot 3 times the game ends and that player loses. In addition the enemy spawn location has a defensive NPC that also shoots the player.

6. Player Controls

KeyBinds	Gamepad	Functionality
W/S	Right Stick Vertical	Pitch
A/D	Right Stick Horizontal	Yaw
Q/E	Left Stick Horizontal	Roll
Shift/Ctrl	Left Stick Vertical	Throttle Up/Down
Space	Right Trigger	Shoot

Additional controls. U key removes the terrain. L key toggles lights in the cockpit.

7. All of the flight controls are tuned with a javascript file. How fast the ship rolls/pitches/yaws and how fast it can travel
8. Changes to the network protocol. Added physics linear velocity to the packet. And made a shooting packet so the players can see eachothers shots.
9. Genre: Sci Fi flight simulator, Theme: Space, Dimensionality 6 degrees of freedom flight. There are no world bounds. There is terrain blocking flight from being too low. Activities: flying around, avoiding defensive NPCs, Shooting enemy player ghosts.
10. Project requirements in order of document

External Models. Ships/Cockpit/Station/NPC all externally made by the team

Networked Multiplayer Handles in the Prot client class and the MyGame class. Server is handled in the other program provided.

Scripting takes place in the ShipController Class. The Javascript provides default values as well as supports runtime changes.

SkyBox and Terrain are both implemented in MyGame.

Lights are an ambient light for the Scene, a Headlight for the players ship. And some spotlights in the cockpit pointed at the ceiling that are toggleable.

3D Sound. The Station has a beeping sound that you can hear when you get near. As well there is music and laser shooting audio.

HUD the throttle indicator and score are displayed diegetically.

Hierarchical SceneGraph. The ship holds the CameraNode and the Throttle Indicators and the Score Indicators and the headlight.

Animation. the throttle on the right hand side of the screen is an implemented animation.

NPCs. there are defensive NPCs that shoot the player. The code for that is in the PatrolEnemy classes. It does utilize a behavior tree.

Physics. The players, NPCs, and lasers all move using the physics engine

The game is first person perspective in the cockpit.

Full Screen Exclusive Mode is offered right as the player starts the game

The IP addresses are command line arguments when running the game

The fat client is used for networking

The game is playable in single player mode, although its just flying around.

All code paths are relative with no hard coded paths.

The game ran successfully on METROID and SONIC in the computer lab

11. All features implemented.

12. None that I'm aware of.

13.

All systems were coded by Martin including networking/gameplay/throttle and score display.

All models except the throttle and score indicator were designed and textured by Jon

All sounds were sourced by Jon

All animations were sourced by Jon and implemented by Martin

14. List of items created by teammembers

Items created by Martin Nivinski

throttleIndicator.obj/mtl/png

scoreIndicator.obj/mtl/png

Items created by Jon Knight

NPC Enemy Craft

Space Station

2 asteroid models

The 'hero' ship and cockpit

The Animated Star (and animation)

Large Capital Ship

From my previous projects:

The Hand (joystick added this project and animations added)

Drop Ship

15.

bensound-epic.wav

<https://www.bensound.com/royalty-free-music>

RocketThrusters-SoundBible.com-1432176431.wav

LaserBlasts-SoundBible.com-108608437.wav

<http://soundbible.com/about.php>

Cartoon-warp-02.wav

<http://www.soundcapestudios.com/about-ses.htm>

TEXTURES

Triangle Borg Wallpaper: Image found on <https://wallpapersafari.com/w/VaPQq5>

“Say thanks: Crediting isn't required, but is appreciated and allows us to gain exposure. Copy the text below” “Only wallpapers that contain © wallpapersafari.com watermark or text like ‘By wallpapersafari.com’ are property of wallpapersafari.com. You are allowed to use and distribute those as long as you do not remove any copyright or trademark notices or other notices that go with them as defined in the Free Culture License. Other than that all wallpapers published on this website are copyrighted by their respective authors. For content usage rights please read Disclaimer.”

For the Console image (for the Space Shuttle, Atlantis):

<https://www.jpl.nasa.gov/imagepolicy/>

Various Textures

<https://www.textures.com/terms-of-use.html>

16. The Game was successfully played on METROID and SONIC computers from 5029