Hoard

By Ace English and Josh Kelso-Lamb

# How to run

Run compile.batch, then run.batch.

To play online, first run server.batch. Then, in the command line type “java -Dsun.java2d.d3d=false -Djava.library.path="C:\javagaming\jinput\lib" a1.MyGame [ip] [port] [true/false]

Command line arguments include

1. the ip of the server you’d like to try connecting to

2. the port on which to connect to that ip

3. true for fullscreen or false for windowed mode. Windowed mode is reccomended.

# Special Requirements

None. This game is played with a keyboard and mouse.

# How to play

The knight waits for the dragon to set up their lair. The dragon has multiple rooms with which to defend their hoard, and can spend some of their gold to purchase traps and rooms. When the dragon is ready, the knight will teleport into the lair and now must try get to the hoard.

The dragon should try to stop the knight while spending as little of his hoard as possible to achieve a higher score.

### Controls

**Knight:** WASD to move, arrow keys to look around. Space to jump. Escape disconnects from the server.

**Dragon:** WASD to move. Arrow keys affect pitch and yaw. Q and E control roll. Space to roar. Lair building can be done using the mouse UI

# Requirements Met

**Blendered Models:** knight, dragon, torches, traps

**Networked Multiplayer:** Thin-client

**Scripting:** In single player mode, the dungeon will randomly generate for the knight to navigate if the human player chooses to play knight. Written in javascript.

**Skybox and terrain:** outside of lair. While waiting for the dragon the knight can kick around a ball on the terrain.

**Lights:** in some dungeon rooms. Dragon can turn them off if desired. Ambient light also implemented.

**3D sound:** ambient music for set up and a different song for raiding. The dragon can roar to psych the knight out.

**HUD:** Dragon has a hud for base set up.

**Hierarchical Scenegraph:** rooms are built as node groups which are connected to a larger dungeon parent nodegroup.

**Animation:** knight walking animated

**NPC:** On single-player mode, the computer plays the knight if the human player chooses to play dragon.

**Physics:** knight can jump. Traps use collision detection. Balls in waiting area use physics.

# Assets

* Floor, wall, gem, knight, torch and skybox textures made by Ace.
* Dragon model and terrain made by Josh
* Music from https://filmmusic.io:

"Klockworx" and “8bit Dungeon Boss” by Kevin MacLeod (https://incompetech.com)

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* Dragon roar sound effect by user frasbr on freesound.org <https://freesound.org/people/frasbr/sounds/145729/>

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