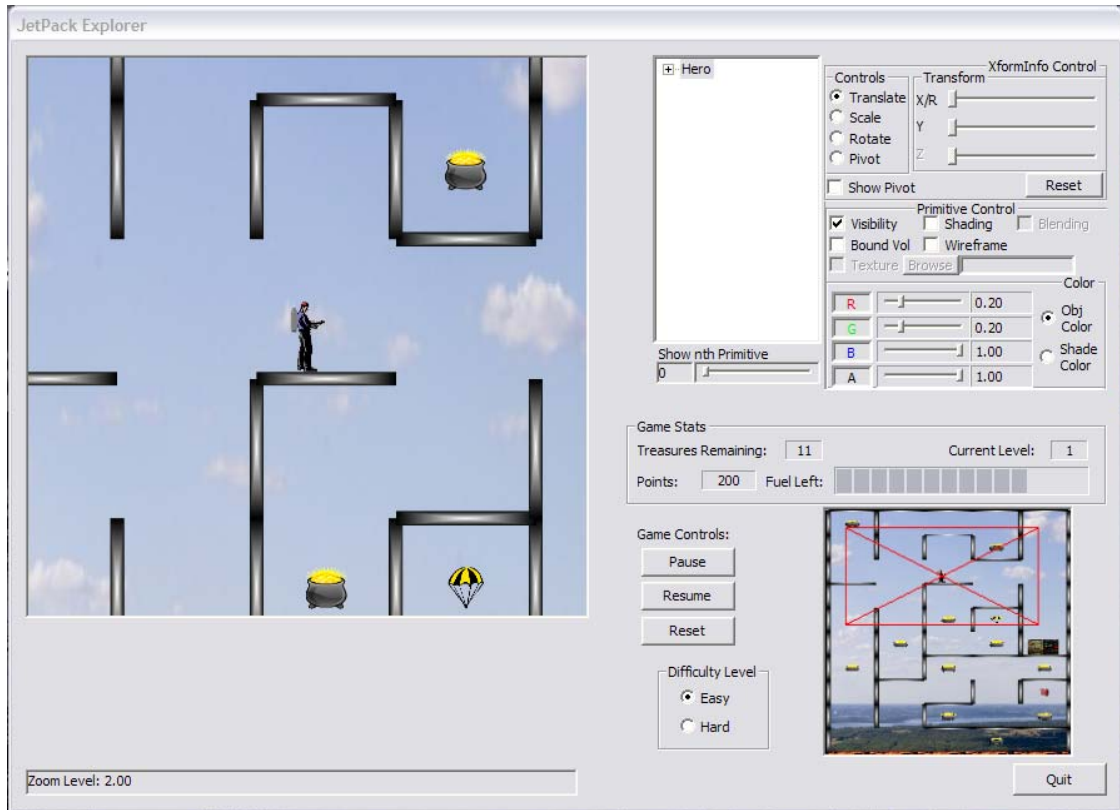


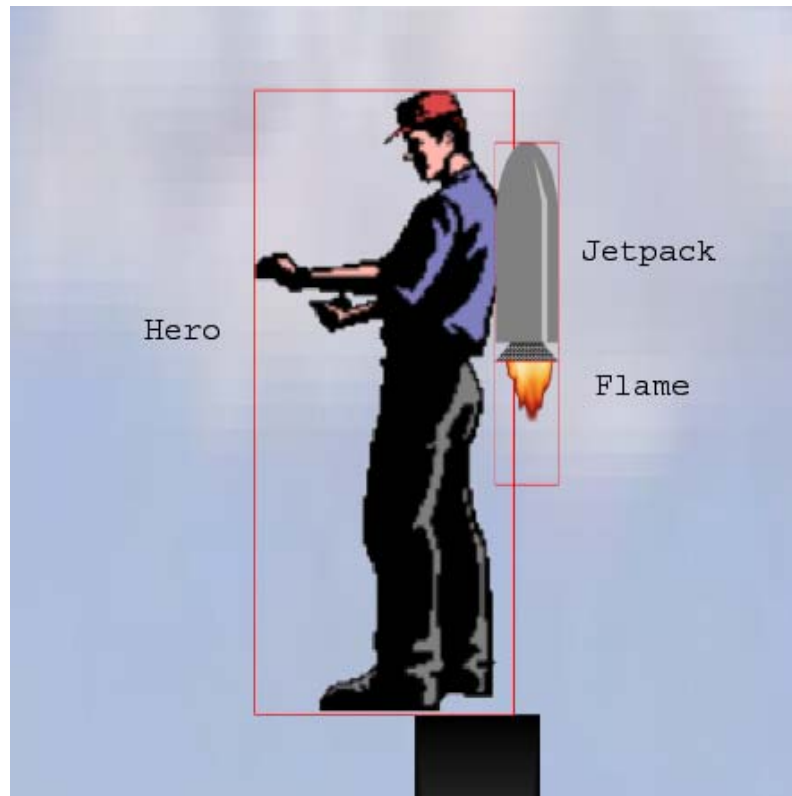
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CSS450 Final Project Report
Jetpack Explorer



User Manual

The object of the game is to collect the treasures before the jet pack fuel runs out and then advance to the next level. Once the jet pack fuel runs out you will only be able to move left or right. There are also areas to avoid; some of the floors have lava flows in them. Touching any of the lava flows will result in fatality. To advance to the next level all treasures must be collected at which point a door will open to the next level.

The controls for the game are the left and right arrow keys to move the pilot in the left or right direction. The spacebar is used to fire the jetpack. The up arrow key is used to go through an open doorway.



Hero Design

The hero is the jet pack pilot. The pilot is composed of the hero body, the jetpack, and the jetpack's flame. Each of these are Scene Nodes, inside the rectangle primitives have been texture mapped appropriately. The Jetpack's flame provides animation during flight via texture flipping.

To provide collision support for the walls, the pilot's bounding box is compared to the collision grid. If there is a collision with a wall, movement is disallowed. The collision support for the lava floors and the treasures is done by comparing their respective bounding boxes with the pilot's.

Evaluation

Known Bugs: We have not found any obvious bugs while testing the game.

Limitations: The power ups have not been implemented.

Possible Future Features: More levels and different kinds of treasures.