CSC8503

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https://youtu.be/l9ebfDj7yPw?si=zuZn0lCNzSetFGDj

https://youtu.be/PzxxWGQyqJ4?si=ahXgRb8lOOcfWluz

Keyboard control:

Menu: F1 to main menu to choose game mode, 1 to start survival mode, no limited time, if collision with the left enemy, game over. 2 to start timekeeping mode, till to set time, game over. ESC close game. P pause and continue. G open and close gravity.
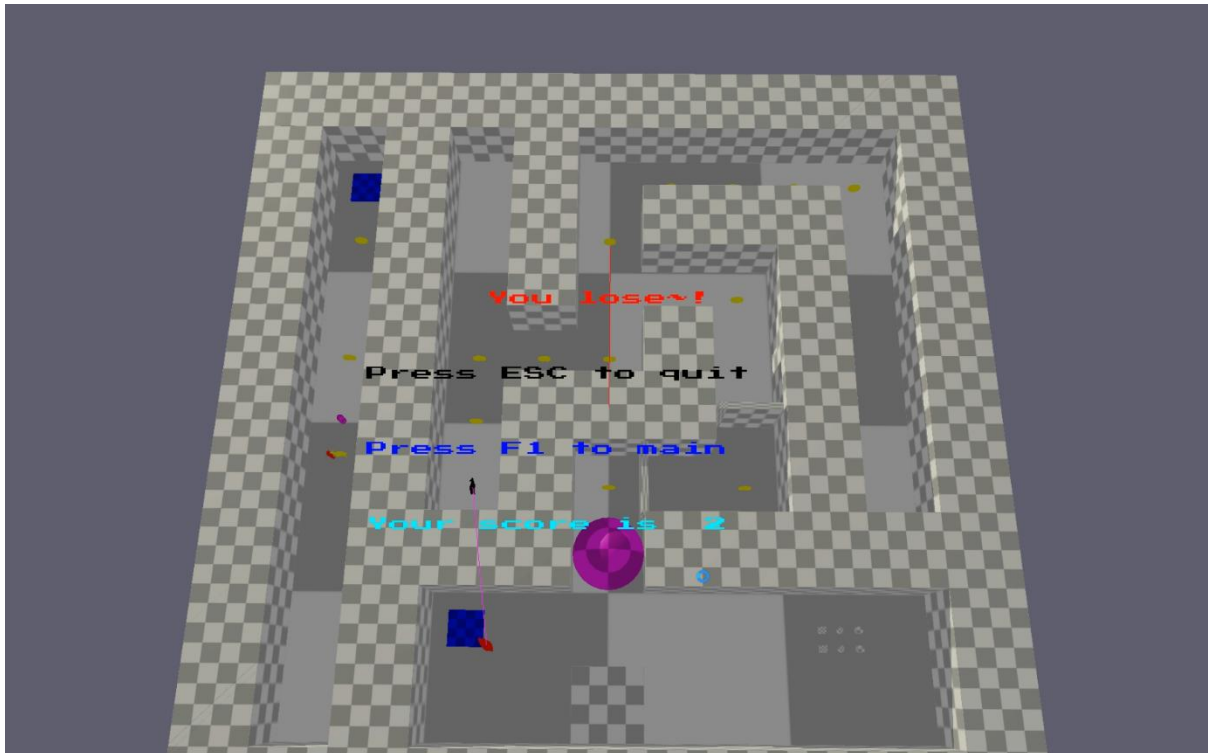
Q to open and choose mode.

In choose mode, Mouse left click to choose object then right click to add a torque. WASD move, space for jump.

While a object be choosed, Keyboard keydown L to Lockmode, camera locked in some position. WASD move object.
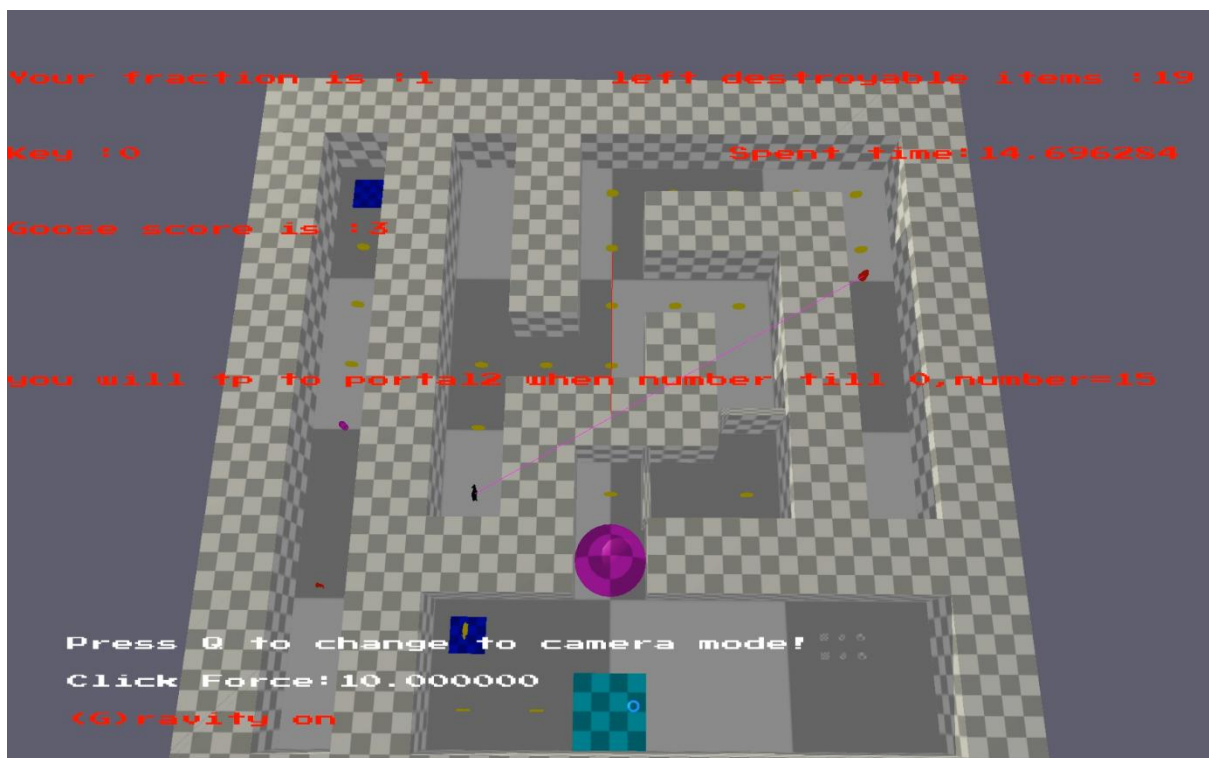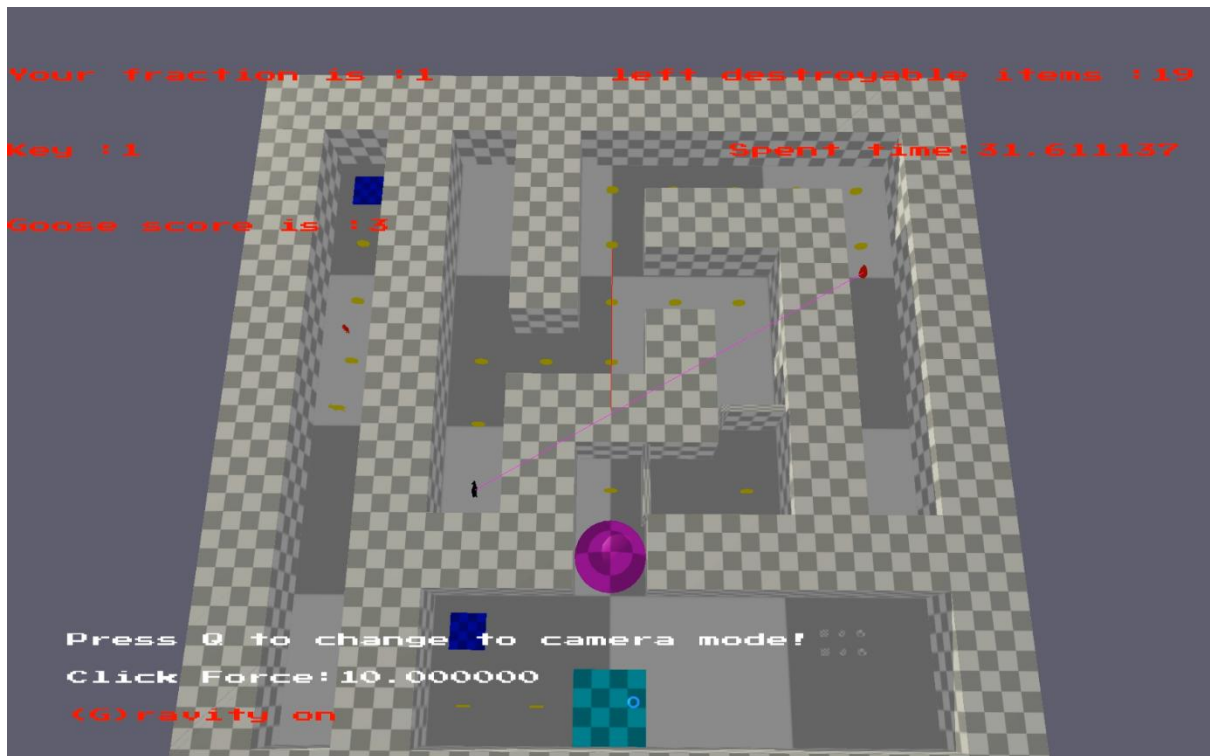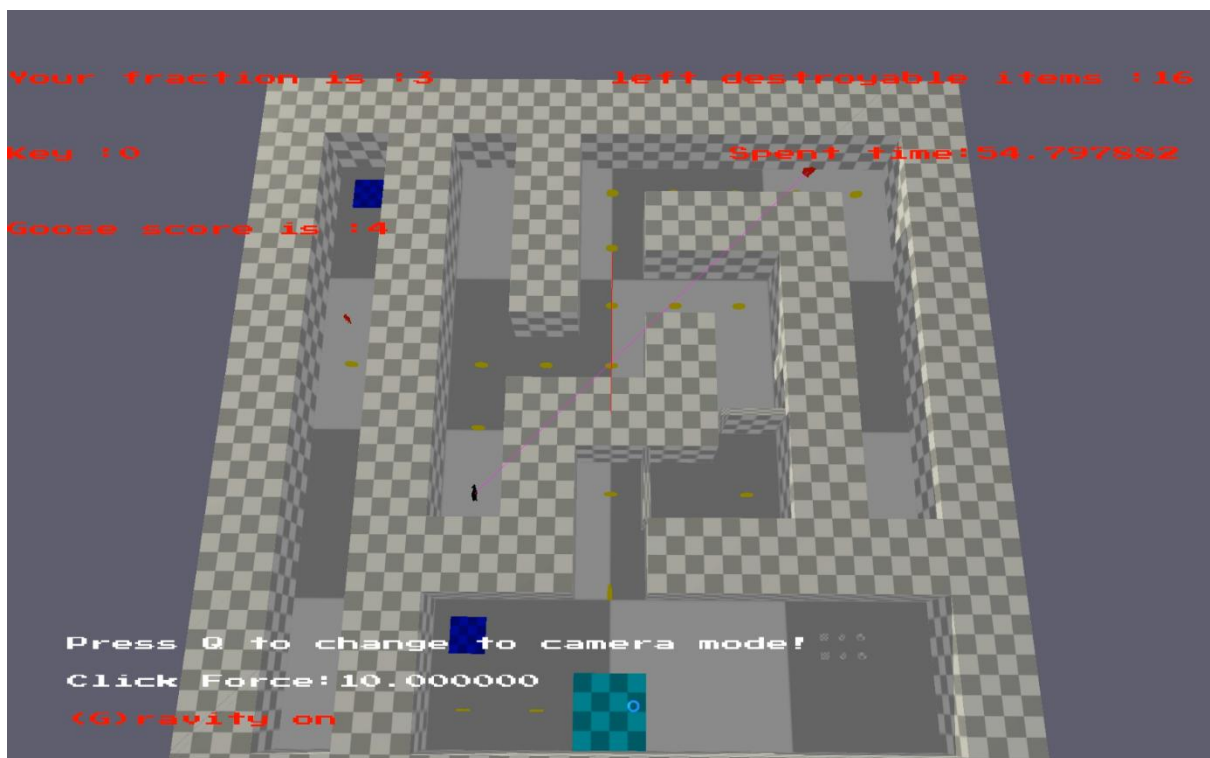
In game:
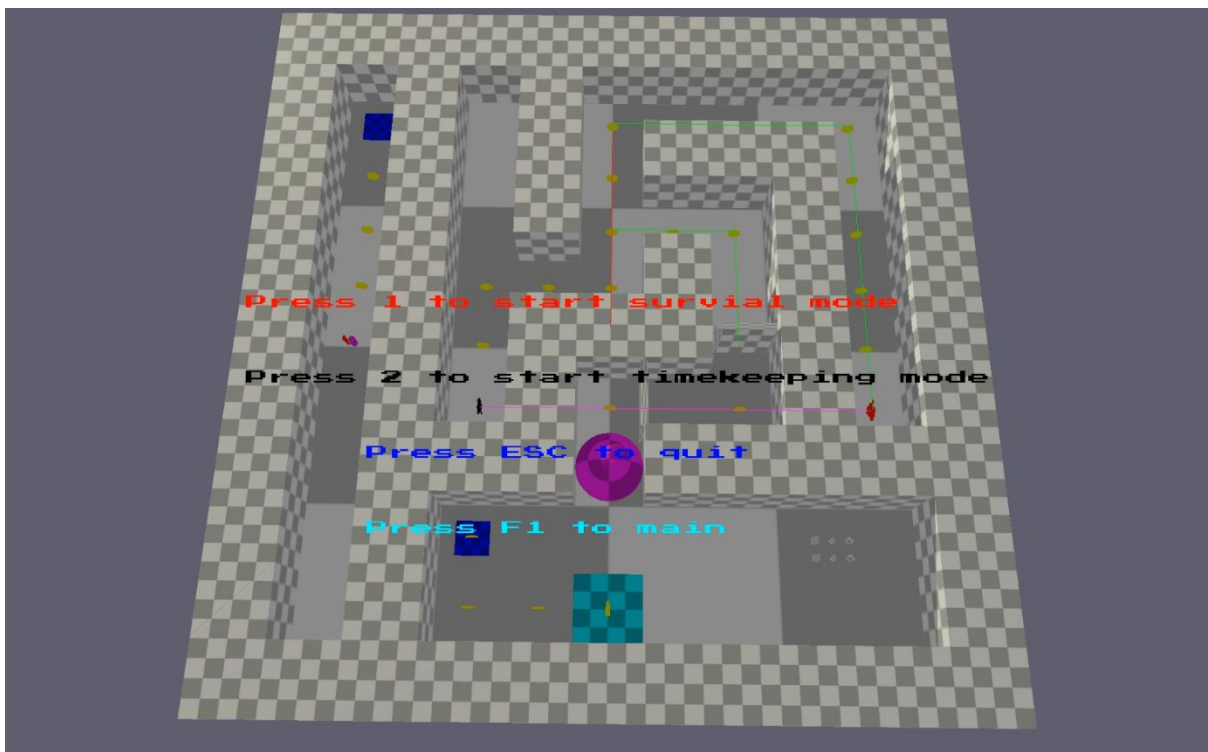
Main menu

lose the game

Player teleport, sphere AABB collision
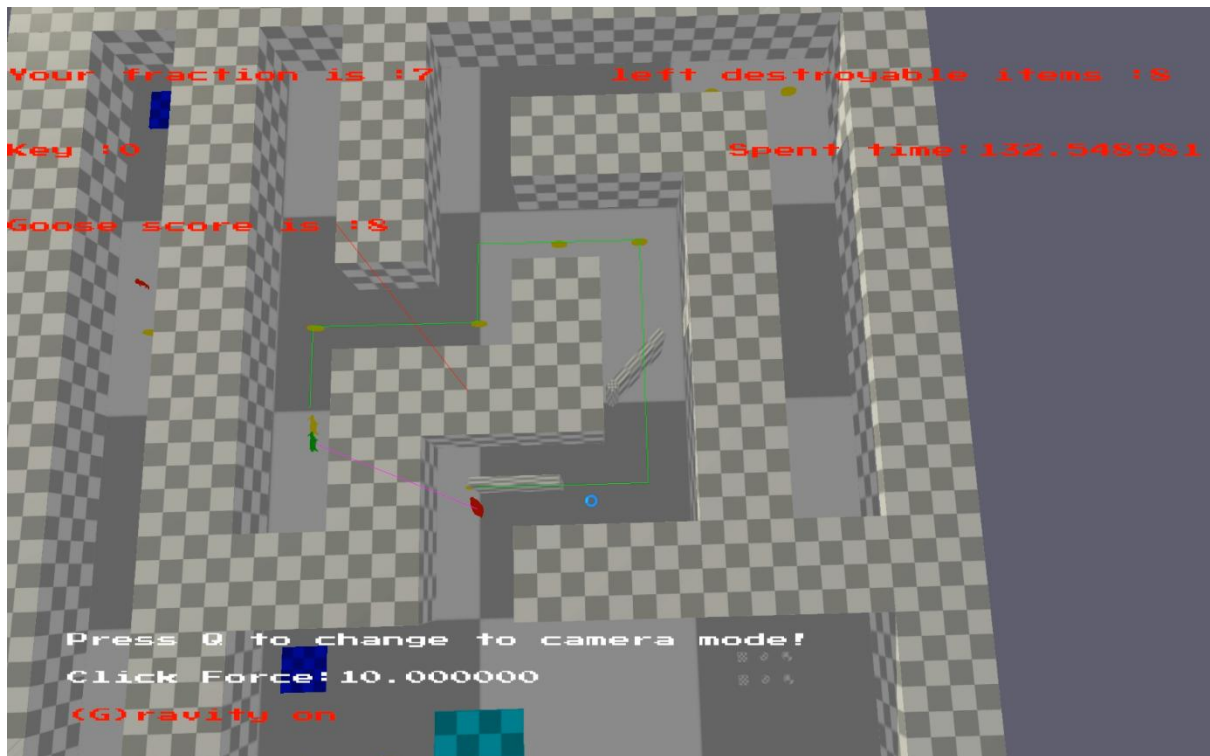
Get key, sphere capsule collision

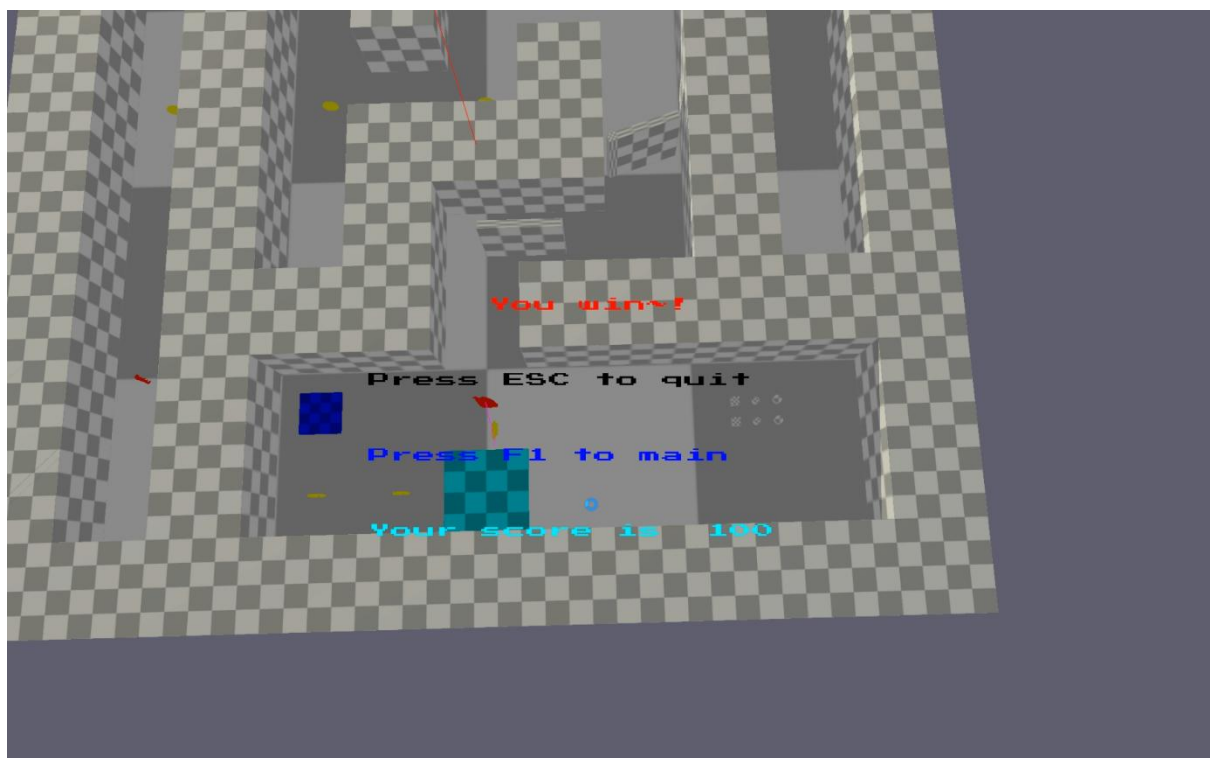Broken obstacle, sphere intersection,player and goose get coin, goose rob player coin
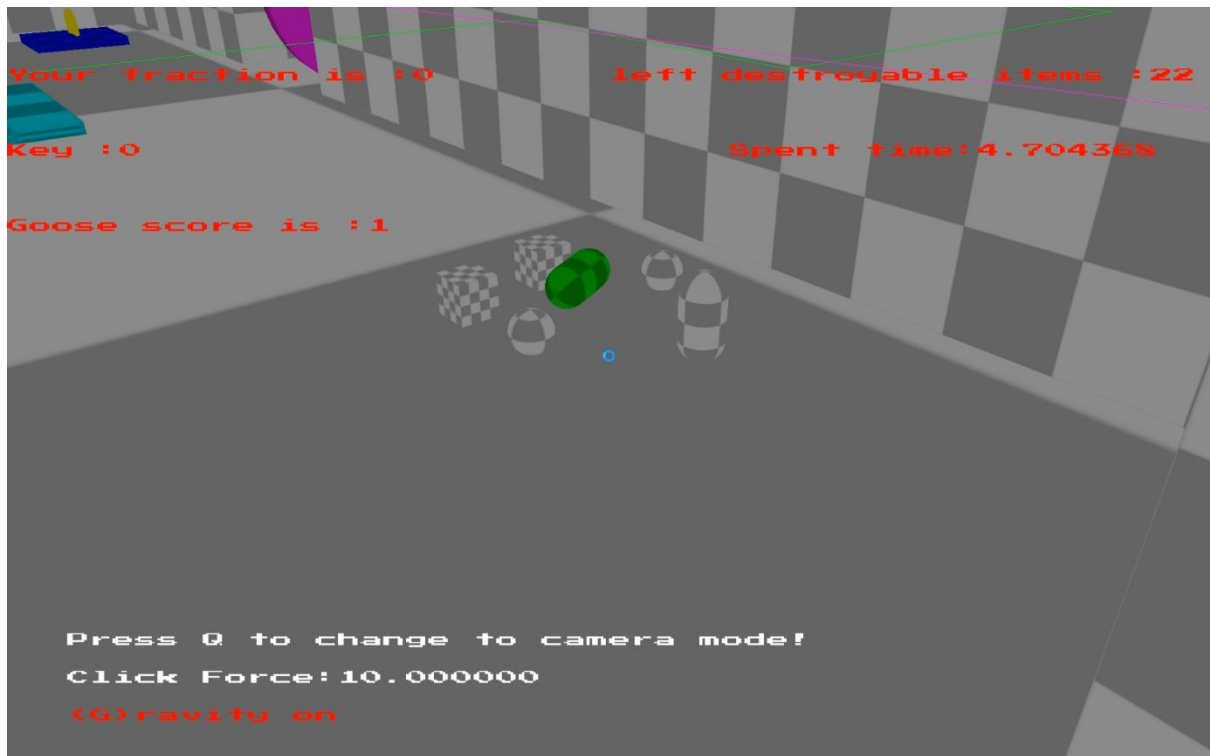
Obb sphere collision

Hinge constraint Door and height constraint and position constraint
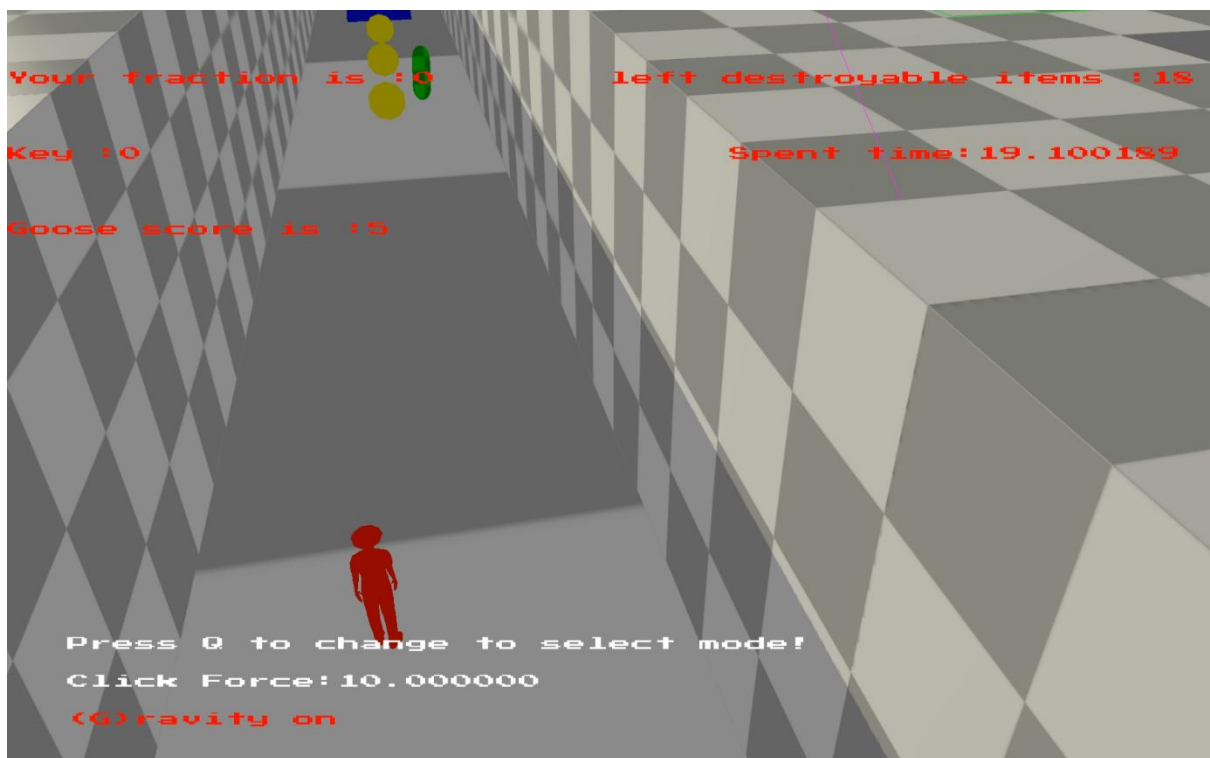
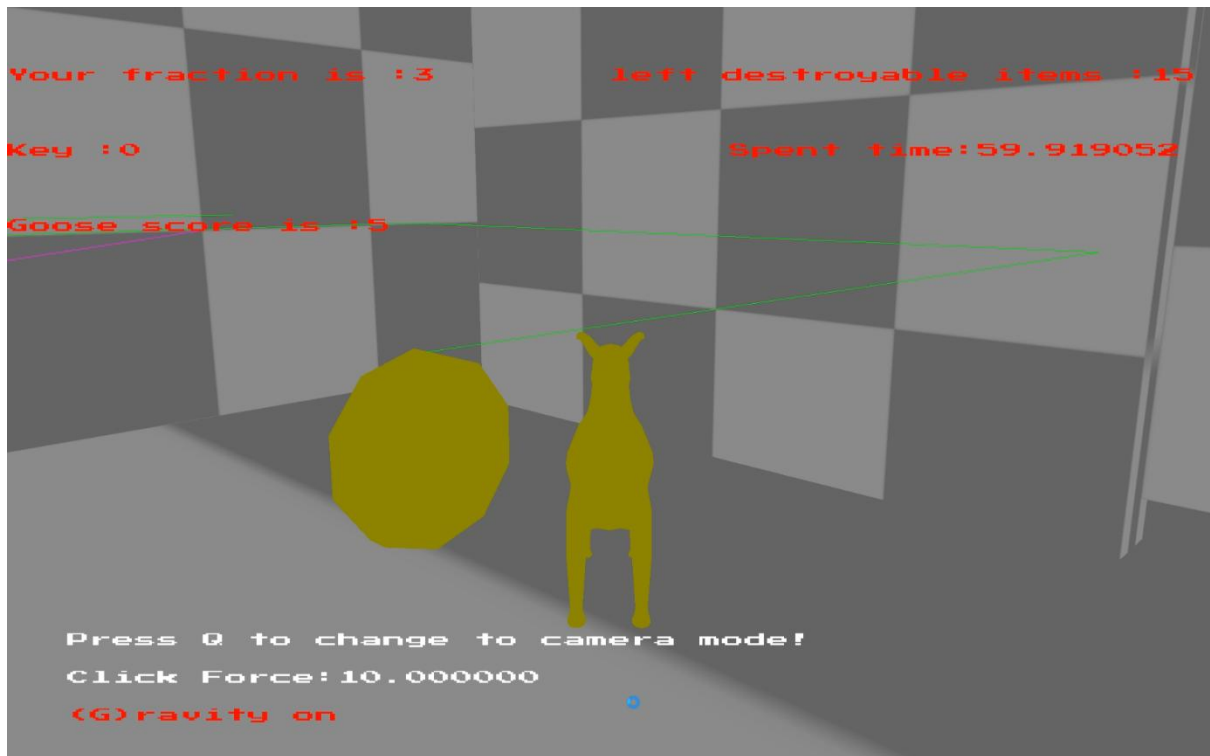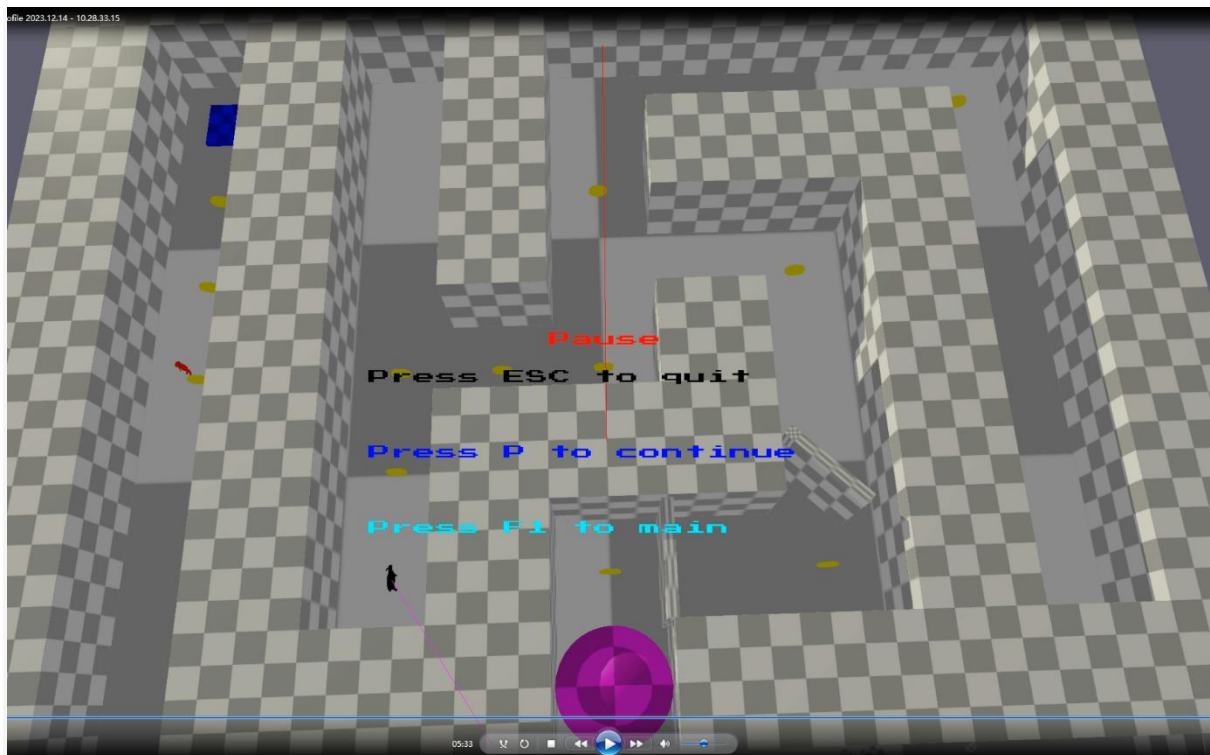Sphere intersection, position constraint, ray casting and orientation constraint, ai find path

Win

Capsule sphere, capsule AABB collision
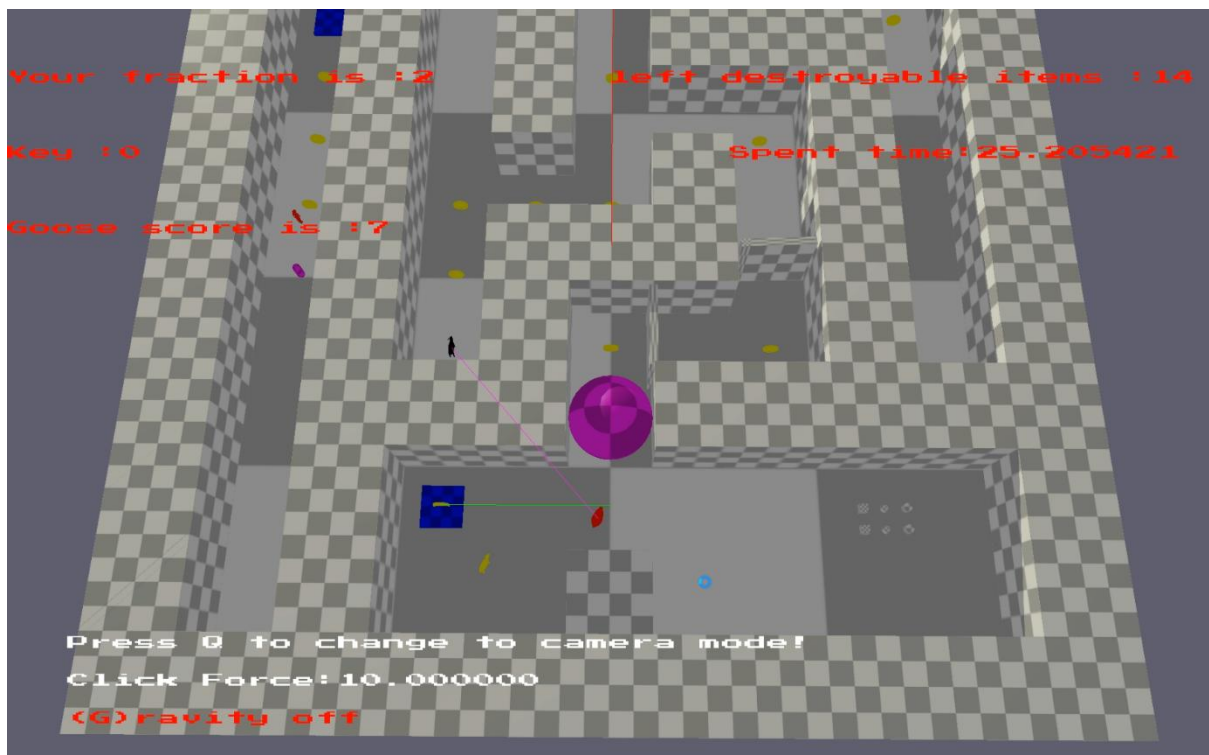

Ai state machine

First-person perspective

Pause

Goose behaviour tree

Goose(sleep, go to door, by pass door)(speak,Chase)

Ai goose avoid obstacle, player use force torque impulse for rotation and movement and friction

OBB