**Controls:**

WASD to move.

Move the mouse to look around.

Click to shoot where you are looking (holding down doesn’t work, have to click again to shoot more. This is as holding down just didn’t feel good).

Space to dash (move fast for a bit) if you have it up (top-right corner of the screen, below to the red-bar that it your health bar, there will be a boot if your dash isn’t on cooldown).

**What was done for the game**

Implemented A-start pathfinding using delta max heuristic for rats on a per tile. The red path shows the path that the rats are attempting to follow (drawn from the center of each tile to the next, starting with the center of the tile that the rat is on and ending with the center of the tile that the player is on) – note that this may not correspond exactly to the position of the player and the rats at all time, as the player and rats do not have to be on the center of the tile.

Rats attempt to move from their current location to the center of the next tile on the path. Sometimes this means they encounter obstacles (say if they collide with the corner of the tile to the left of the tile they are trying to move to diagonally). There is a push-around in the case that this does happen (resolved with tile collision).

However the push-around doesn’t always work. I suspect this is because of dithering (the rats path is recalculated every frame, and sometimes a different path that is as short will be the result. This is why sometimes it looks like the rat is moving on two paths) In order for the pusharound to work the rat has to keep moving on the same path.