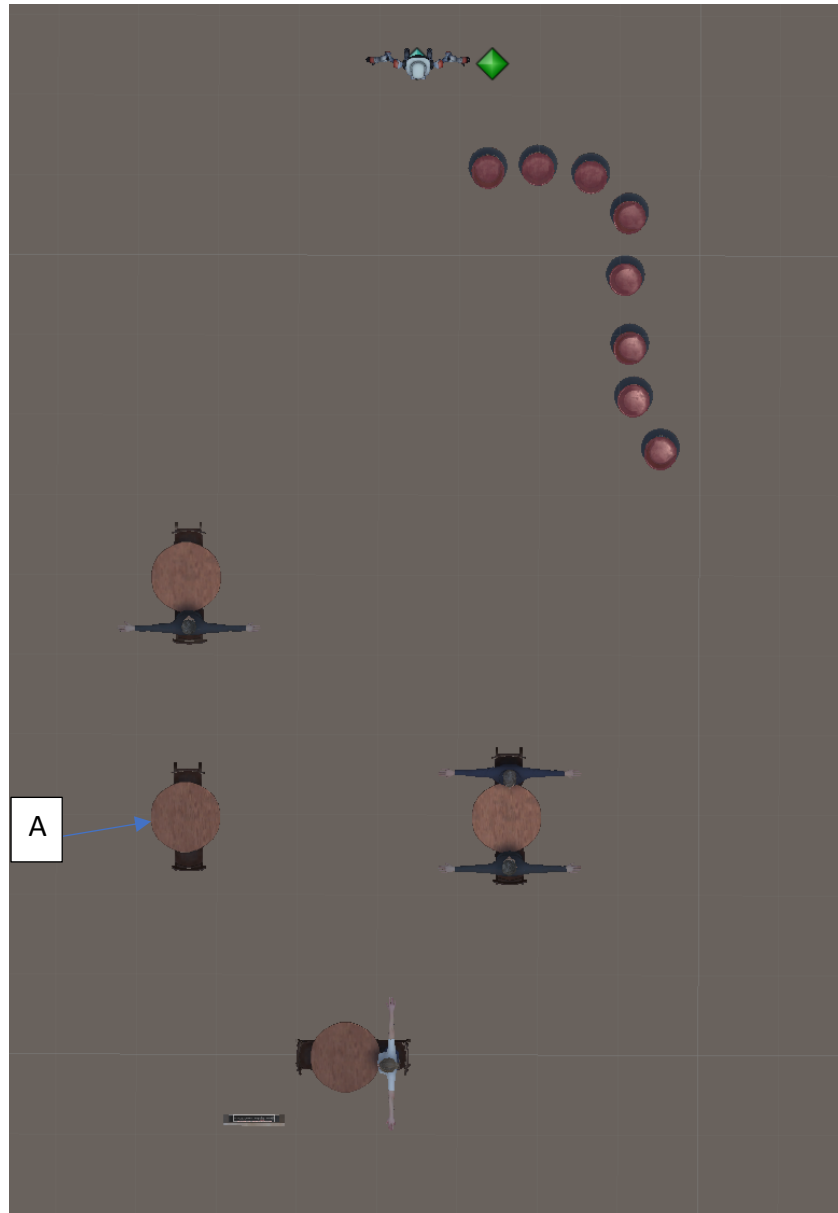


The following is a document holding information for path generation for the legibility study. Below is a birds-eye view of the restaurant (with walls and floors removed). The four target tables are the circle tables. The participant's table is table A.



**Room Dimensions:**

Front Wall:  $y = 3.05$

Back Wall:  $y = -10.7$

(Front and back marked by yellow diamonds)

Side Wall 1:  $x = 1.23$

Side Wall 2:  $x = 11.22$

(Side walls marked by red diamonds)

The room is 13.75 meters from front to back and 12.45 meters from side to side

**Table Layout**

The tables are circles that have a diameter of approximately 1 meters. The chairs stick out about another .25 meters \*without people in them\*

The center of the tables are 2.5 meters apart (moving from front to back), or 3.75 meters apart (moving side to side)

**The table's centers** are at the following locations:

Table Front: (3.6, -4)

Table Viewpoint: (3.6, -7)

Table Across: (7.6, -7)

Table Perpendicular: (5.6, -10)

So, for example, Table Front is 7.05 meters from the front wall and 2.37 meters from side wall 1. The goal locations are .7 meters towards the aisle and adjusted slightly further to make the server stop most naturally.

**The table's goal locations** are at the following:

Front: (4.3, -4.3)

Viewpoint: (4.3, -7.3)

Across: (6.9, -7.3)

Perpendicular: (5.6, -9.3)

**Path Start Locations**

Inside door to kitchen: (7.4, 2.37) - green diamond

Outside door to kitchen: (6.46, 2.37) - teal diamond

So basically, the server may always want to start at (7.4, 2.37) and move to (6.46, 2.37) before following whatever path

## **Final Note**

The above locations are all described in the (x,y) plane for easy conversions to the 2D simulator we're using for path generation. Thus, what is described here as y-axis and y-coordinates are actually the z-axis and z-coordinates.

Also, be extremely careful with using hard coordinates when objects are children of other objects. Unity automatically adjusts their position in terms of the parent object.