**Work in Progress Report #4**

**Major developments/breakthroughs(reference specific code please):**

Server Hit Detection: Finally fixed and completed the server sprite. The sprite can now walk towards the table/bar that was clicked on. We now use a function that updates the server’s coordinates after it has received the goal location from the screen level.

private void directions(SpriteBatch batch) {  
 if (nDir == 0) {  
 System.out.println("NORTH");  
 fY += 1.5f;  
 setY(fY);  
 batch.draw((TextureRegion) AnmCreateAnimation[0].getKeyFrame(ElapsedTime, true), fX, fY, fW, fH+50);  
  
 } else if (nDir == 1) {  
 System.out.println("EAST");  
 fX += 1.5f;  
 setX(fX);  
 batch.draw((TextureRegion) AnmCreateAnimation[1].getKeyFrame(ElapsedTime, true), fX, fY, fW, fH+50);  
  
 } else if (nDir == 2) {  
 System.out.println("SOUTH");  
 fY -= 1.5f;  
 setY(fY);  
 batch.draw((TextureRegion) AnmCreateAnimation[2].getKeyFrame(ElapsedTime, true), fX, fY, fW, fH+50);  
  
 } else if (nDir == 3) {  
 System.out.println("WEST");  
 fX -= 1.5f;  
 setX(fX);  
 batch.draw((TextureRegion) AnmCreateAnimation[3].getKeyFrame(ElapsedTime, true), fX, fY, fW, fH+50);  
  
 } else if (nDir == 4) {  
 System.out.println("STOP");  
 setX(fX);  
 setY(fY);  
 batch.draw(txtServer, fX, fY, fW, fH); //normal  
 }  
  
 }

**Major Challenges/setbacks(reference specific code please):**

Multiple Guests: Had to change the input detection on the screen level. Unfortunately, it caused the whole SprGuest class to be reworked. We have it almost caught up to where it was at before we moved the input to the screen. It still has some bugs, and we haven’t handled the overlapping problem yet because we wanted to get the scratch working like it was working before we changed it before adding in the dragging individual guests. It is almost there but is taking a long time to recode everything.

public boolean touchDragged(int screenX, int screenY, int pointer) {

for (int n = 0; n < nGst; n++) {

if (arliGuests.get(n).getBoundingRectangle().contains(vTouch)) {

arliGuests.get(n).drag(vTouch, viewport);

}

}

return true;

}

**Any modifications to your specifications/release schedule:**

N/A

**Description of your scratch/test program:**

SctStackGuests; The first guest will enter the restaurant, and the second guest will come down and land on top of the previous guests without overlapping (this is not in the scratch at the moment). This is done by checking the status of the previous guest and passes a set of “goal coordinates” for the next guest to walk to.

**Describe the generic concept you needed to test out:**

SctStackGuests: We had to test the guests’ ability to stack on top on another to portray the idea of them “lining up” for a table. If one of the guests were then seated. The guests previous to the one seated move up the line. Most of this is dependant on the “goal” variables we pass between the guests.

The walk down function checks if the guest is at the goal. The goal at first is 30 and will increase with each guest that comes down. The goal increases by the height of the guest, which is 100, multiplied by the guest number in the list and added by 30 because that’s where the very first guest stops.

if (n > 0) {

fGoalY=0;

fGoalY = 30+ (100 \* nGst);

}

The function only allows the guest to walk if it “isDown” is not true.

if (fY > fGoalY && !isDown) {

fY -= fMove;

setY(fY);

}

if (fY <= fGoalY) {

isDown = true;

bSitting=false;

bCanDrag=true;

}

Else, the guest will stop in place. If the guest is less than or equal the goal then isDown will turn true and the Guest can be dragged.

**Source any website/book that helped you with that concept:**

<https://stackoverflow.com/>

<https://libgdx.badlogicgames.com/ci/nightlies/docs/api/>

<https://github.com/DaphneLai/POLYGONE-Final/blob/master/core/src/gdx/objects/Shape.java>

<https://github.com/Ameer-Mushani/Sort>

<http://3ui.sgrondin.ca>

<https://libgdx.badlogicgames.com/ci/nightlies/docs/api/com/badlogic/gdx/graphics/glutils/ShapeRenderer.html>

**Describe the code and the lesson that you learned from it:**

N/A

**Describe any challenges that you enjoyed in integrating this scratch code into your major project:**

N/A

**Peer Assessment:**

Sarah: 100

Maddie: 100

Daphne: 100