Major changes: Having pushed back the milestone for this week back by at least a week, will hopefully have caught up with the next milestone. The previous representation of the yarn last time did not work as well as hoped and I recently found a new method to try to represent the different stitches.

Accomplished: Have created a sort of dependency map of the how the stitches mesh together, specifically looking at how different loops interact with the rest of the textile piece. The loop dependency got a bit messy, as due to the nature of crochet stitches, it ends up such that the yarn interacts with itself is a bit more complex than just showing how loops interact with each other.

Milestone: Currently have a type of representation in 2D that I will be working with to represent the stitches. It is planned to continue using a tiling method of representing the stitches, such that within some sort of arbitrary box thing, we can have threads that come in and out on the sides such that they fit together when put together with other tiles or connected by non-intersecting yarn. How this would work is that we can create a tile set, such that within each tile, the yarn must intersect in whatever the given way is specified within the tile, with the appropriate number of lines of yarns going into the tile and out of the tile. To connect two tiles together, you either place two of them next to each other, again with the number of in and out yarn threads being the same, or that the two tiles are in some arbitrary physical space, and given that, we can connect them by yarn that does not intersect outside of the boundaries of the given tiles.

Surprises: The tiling method seems simple enough to implement, but due to the free-handedness of the tiles at the moment, it seems that creating the placement of the ‘in’ and ‘out’ yarn will be a bit more of guess and check. Along with the fact, that this representation is still in 2D, and there is a 3D component that is more or less arbitrarily represented within the 2D representation.

Looking Ahead: Hopefully this current method of representing will work and that from here, such that I will be able to start creating the physical models of the stitches from this type of modeling. Most likely it would be creating the 3D renderings of these tiles such that then from there, we are able to form the rest of the stitches, as we have a repeating method of creating them. Along with that, we then can move onto working with the edge cases due to yarn being very mallable.

Revisions: There is a chance that I will have to change the next milestone slightly, such that, instead of having the full row of stitches to be modeled out, rather, that the pieces/tiles for the cells can be modeled out.