20 February 2022
Project – Pandemic Simulation

General summary:

- Have you received the link to the GitHub repository? I emailed it out to everyone but let me know if you haven't and I'll create a new one. I also realized that I didn't use my GaTech Github account for this so the email might've gone to spam. If you haven't received it, please check.
    - I want us to use Github because it will make it easier for all of us to work on the project together, and it will make it easier to identify what's causing bugs when our model breaks
    - If you're not familiar with Git and GitHub:
        - This for a rundown on what Git is/what it can do
        - This for a quick GitHub tutorial
- We decided that for now, it would be best to try building the simulation in ARENA because it abstracts away all the complicated stuff, and if it doesn't work, we can migrate to Python
    - There are some tutorials available on simulating pandemics in Python, but that requires knowledge of OOP - Shilpi says she can handle it, but since Python is our backup language, let's keep that on the backburner for now
    - Still, if you want to learn OOP:
        - For fundamental concepts – can watch passively
        - Python specific OOP

This week's tasks:

- Midterm!
- ARENA lectures
- Please read the following articles if you can:
    - This Wikipedia article – at least the introduction, basic SIR model, SEIR variation, and modelling vaccination sections
    - This intro to pandemic simulations – the code isn't important for now but the analysis seems useful
    - This paper on the NCBI website
- Gauri will try to come up with a list of functional requirements for the simulation, use cases and a basic mathematical model

Next week's agenda:

- Discuss the mathematical models
- Decide on best practices for how we're going to be maintaining our code/simulations