Course: COMS 4901 Projects in Computer Science
Project Name: Going Viral
People:
- **Student (me):** Ahmed Alzubairi
- **Professor:** Gail E. Kaiser
- **Biobus Faculty Point of Contact:** Robert Frawley
- **Misc:** Zarina Akbary
    - Note: Robert wanted me to work with her on the project. She doesn't have much engineering experience as she studies biology. I am expected to do pretty much most to all the engineering part of the project. I wanted to bring her up because there is a chance she might help with the project as well.

Programming Languages: JS for front end, and Python for backend for the model and control part of MVC.
Platform: Web, so I guess any of Windows, Mac, or Linux since we are doing this on a browser and you can use a browser with any OS.
Github: https://github.com/AhmedAlzubairi1/GoingViral
Purpose:
- Biobus is a company dedicated to exposing students from low-income areas to science and biology. I have similar interests because I have been a teacher in some form or another since high school teaching STEM topics to students form low-income schools. As a result, I decided to intern with them from my senior year of high school until my freshman year of high school. Since then I have become very close with the company and staff. Lately Zarina mentioned to me about a card game interns developed to encourage students to be interested in virology. In the game, students compete by role playing various viruses with the objective of going to the final stage of the virus' development. The player who reaches the final stage first wins. More detailed documents to explain the concept of the game and the rules is found here and here.
- In my conversation with Zarina and Robert I mentioned how it was a shame students couldn't physically play with the game in person and that the remote aspect of their schooling has changed how they approach learning. Giving that, I thought about the idea of branching the physical card game into the virtual world. In this case, I want to develop a web application of Going Viral using the knowledge I learned of software development from my Advanced Software Engineering course and my Open Source Development course.

Goals:
- Build a working version of the game that Biobus can deploy for students by the end of the semester.
    - Work with Robert and Zarina on the design of the game to best fit the needs of students.
- Conduct weekly/biweekly meetings/sessions with Robert Frawley regarding the progress of the project as a whole.
- Use flake8 and flake8-bugfinder as a style checker and bug finder for the backend to maintain consistency.

- Create tests using pytest as well as continuous integration tools (i.e. travis ci, codecov) to ensure that the project is more maintainable for further modifications after I deliver the project to Biobus at the end of the semester.
- If I have time, I would like to deploy the app on the internet through a service like heroku.
  - This is dependent on time as well as the needs of Biobus
- Accomplish the goals of what Robert and Biobus expect of this game.