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 (rob@biobus.org)
- **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

Progress:
When I first started this project, I didn't fully understand Rob's vision of what he wanted this project to be. In our initially meeting, we talked how he and BioBus wanted to demo the card game in an expo and it would be really great if they have a physical card game as well as an online copy to demo in the expo to get more funding through grants and to further spread the reach of the game to students. To learn more about the game, Rob played the game with me in a virtual environment so that I can understand how the game should be best conveyed to the audience.

In my initial midterm report, Rob had one thing in mind. He wanted me to try to complete a working MVP that demonstrates the functionality of the game. That was my focus up until this point. My midterm progress is that I have completed a functional working MVP of the game Rob envisioned, which had an online design inspired by me. My plan for this project is that I will focus on completing an MVP by around mid March, and spend the remainder of the semester working on improving the game's esthetics and adding documentation and production tools such as a style checker, bug finder, code coverage, and unit testing. Since the game is complete, I hope that Zarina will be able to work more on improving the esthetics side of the game since she is heavily involved in the design of the game before I joined Rob in his endevor in making an online version of the game. I also would want to deploy this game into heroku after I complete the goals previously mentioned. It would be nice for BioBus to demo this game online rather than by running a python script locally for demo purposes to further improve the odds of receiving grants to fund the game's development.

In its current state, the game starts off with player 1 being the Flu virus trying to beat the Ebola virus. The way the flu virus beats ebola is by passing stage 5 first. You start the game by clicking draw. If you draw an immediate card (indicated by green '!' signs), you must play it. You play a card by first clicking the play card button and then clicking the card you want to play. If

you get enough ATP points to reach the next stage, you can click the Advance Stage button to go to the next stage. Once you finish your turn, you can click end turn to have player 2 go. The first one to get enough ATP points to pass stage 5 wins the game. To restart the game, simply refresh the screen. It reloads a new game whenever someone goes to the link, thus a simple refresh acts as a new game button.

How to Run:
Keep in mind, the code doesn't have much documentation or comments. I wanted to do that stuff after I completed the MVP of the game. That would be my focus for the remainder of the semester.
To run the game, simply go to GoingViral directory and run **python server.py**