Hello everyone, today im going to present my final project.

The primary goals of this project are to implement the key ideas and skills I leaned from each module of this class. In this project, one of the most important takeaways is how to import and utilize new libraries with python APIs. By reading tutorials and documentations from official website, I developed a deeper understanding of how to use a new library to accomplish functions I intended to have. Also, I improved my coding skills by practicing the bulk of code.

Some highlights of my project here. My project was designed to introduce a maze for a moving object to find a proper way out of it. There are basically two fundamental elements of the maze, first, the frame of the maze, second, the moving object, a bee, in my case. I also imported pygame for the animation. Also, I included error handling methods.

Some skills and tools I used in my project. Nested loops to construct 2-d arrays and recursion. Data structures like nested lists, tuples to express complex algorithms. Of course, the use of recursion and Pygame is the focus of this project. A lot of if-else statements all over the places.

This project can also be improved in other areas. It can be designed to have user-interactive functions. For example, players can press keyboard to control the direction the bee moves. Or they can simply drag the blocks to prevent the bee from getting out of the maze. Since here I intended to practice the knowledge of recursion and other data structures, instead of purely defending on pygame functions, I decided to let the bee find its own way. Also, codes can be more concise by detailed reconstructions.

Overall, Im satisfied with my project since it is the first project based on what I learned from this class. That’s the end of my presentation.