Project Proposal

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1 Project Overview: Pacman Go Home

During this pandemic time, people need to learn how to protect themselves from coronavirus. The key is to stay home, wear masks and avoid contacting infected people. Therefore, our purpose of making this project is to delivery this message to players. We hope people can learn while playing PacmanGoHome.

Users can control Pacman with their 4 cursors keys to avoid viruses and try to reach home. There are three lives initially. In the maze, there are mask and hospital which can each save Pacman life once. There is also be an infected Pacman in the maze. Having contact with him or virus costs Pacman life. The game has two levels. The second level is more challenging as the number of viruses are double moving faster, representing the real-time unexpectedly fast and wide spread of COVID-19.

2 Plan & Timeline

Our initial plan is to build the game with desktop GUI run from Eclipse IDE/Terminal command. However, if we have time, we plan to build a friendly app for users across different platforms (MacOS, Window, Linux) after exporting the JAR file of our source code.

- Week 4/13 - 4/19: Design maze. Gather source images, music. Design algorithm for the movement of Pacman and viruses.

- Week 4/20 - 4/26: Continue designing algorithm for movement of Pacman and virus. Add "mask", "hospital", "sick Pacman". Add level 2

- Week 4/27 - 5/3: Add score system. Test and debug. Successfully export JAR.

- Week 5/4 - 5/10: Produce final app for both MacOS (.app) and Window (.exe). Create presentation.

3   Conclusion

This project promises to be an intriguing game with delicate design, detailed instruction screen, logical algorithm, suitable background music and educational purpose. However, we can see the enormous time and effort required to achieve our goal.

We expect to spend roughly 15 hours working on this project for each person. We plan to meet and work together for the first 2 weeks and will discuss with professor after completing the first product for improvements.