

# COMP 476 – Assignment 3 Programming

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## Running the Game

Please run the **pacman.exe** executable found in the root folder of the project.

## Exiting the Game

No exit feature was implemented. To exit, please use the native Windows Alt-F4 function.

## To Start a Game Session

### To Run Locally

Run the game on two machines on the same network and have one connect to the other with the computer's IPv4 address.

### To Run Online

Run the game on two machines and have one start the server and the other join as a client.

## Controls and Rules

**A:** Left  
**D:** Right  
**S:** Down  
**W:** Up

Eating a pellet will earn the player 1 point.

Eating a super pellet will earn the player 1 point and speed them up for 10 seconds.

The game ends when either all pellets have been eaten or both players die at the same time.

## Special Considerations and Other Information

The assignment was built on top of Lab 8.

In order to avoid a stalemate with the ghosts when the ghosts touch the players at the start location, the game ends if all players die simultaneously (which will rarely happen).

The ghosts do not use the tunnels. This is a feature, not an omission. Since the game is multiplayer, unless the other player goes suicidal and gets very close to the ghost, the ghost will keep following its current target and never change. In order to shake off the ghosts, a player can pass through the tunnel, thereby teleporting to the other side of the level, in turn making the opponent physically closer. The ghosts will then chase the opponent.

Ghost movement is implemented using a NavMesh.