PAC-WARS

Course Project
COP290
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How to play :

1) Catch and eat other players to score 2 points
2) Hit other players with bullets to score 1 point
3) First player to reach score greater than 11 wins!

Game Features :

1) All players spawn at a fixed location, but are invincible for the first 4 seconds. Invincibility is shown by the white blinking player character.

2) At any time, exactly one of the players is the GOD and has the capability to catch and eat other players. GOD will be shown in the top-center of each players screen. GOD will be periodically changed among all the players. A special beep sound alerts when the GOD is changed.
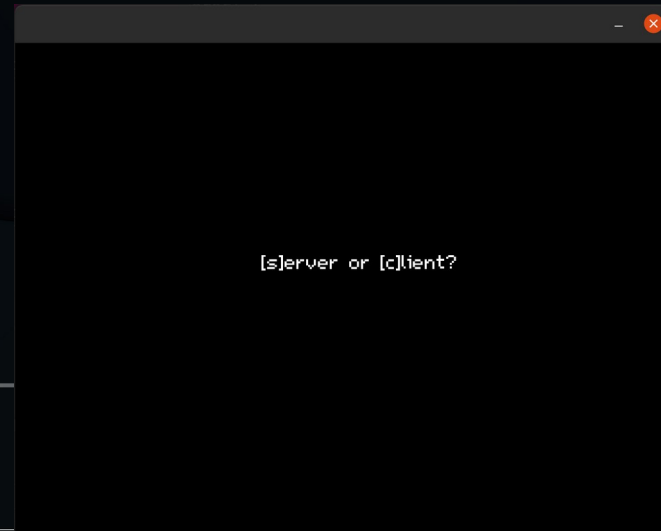
3) A player can shoot one bullet every 3 (approx) seconds. Each player has unlimited bullets.
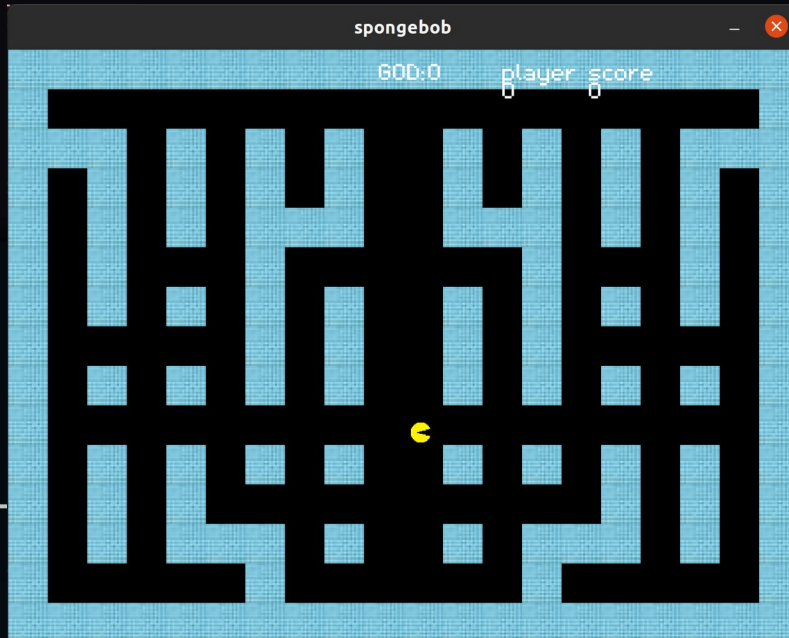
Running the game :

1) make
2) ./game [username]

[username] is shown at the top of the game window. It is an optional argument.
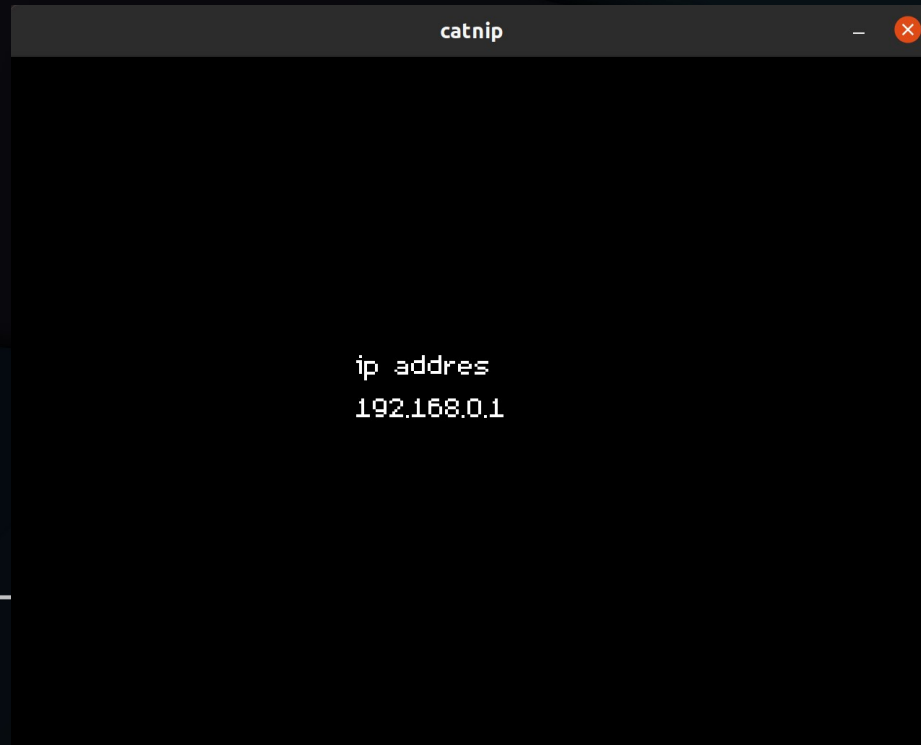
Server starts :

The initial game looks like this. The player is free to roam around, explore and fire bullets. This is a waiting-for-players room.
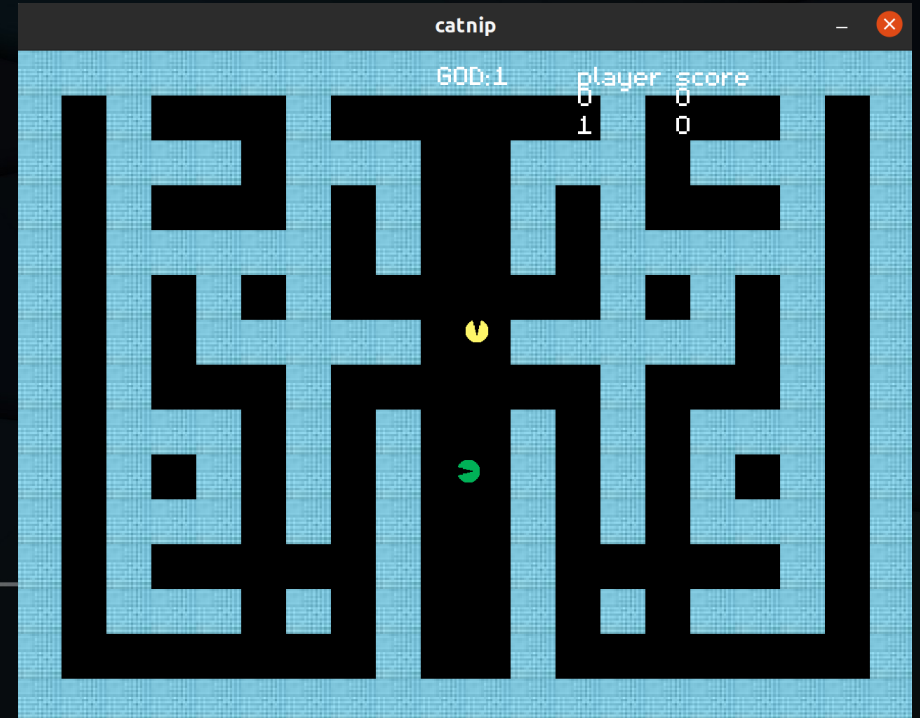
Client creation :

The client puts in the IP address of the server to join the game.

Client joins in :

Game starts when the client joins in. Note how the opponent is shown in green in both, and the player herself in yellow.
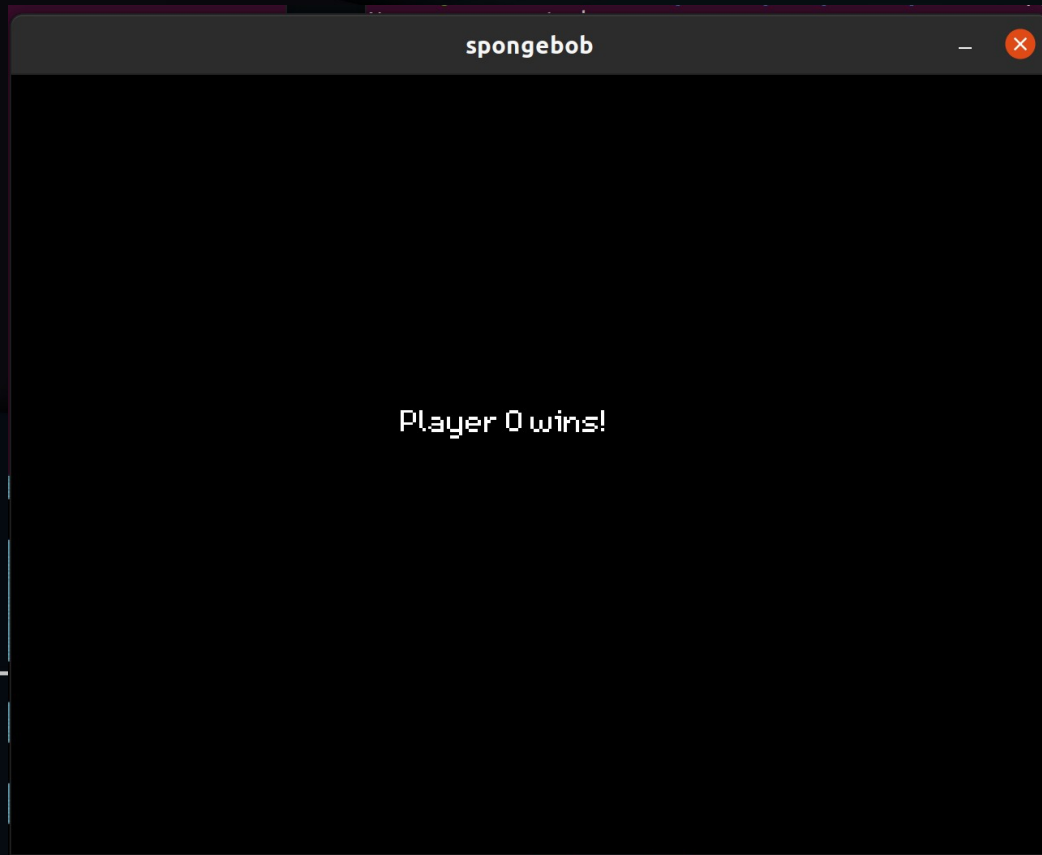
They play :

First player to reach score greater than 11 wins!
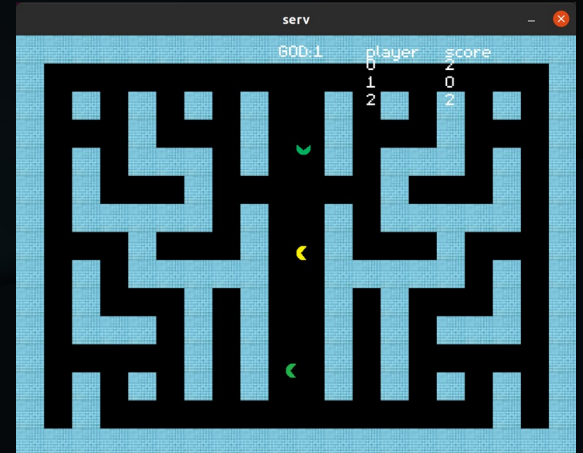
Game ends :

spongebob

Player 0 wins!

Notable Features:

Visuals:
1) Players mouths open and close (look like the are animated)
2) Blinks when invincible
3) Players face in the direction they are moving
4) Opponents in green, Self in yellow

Audio:
1) Game background music control: P – Pause, M – Resume
2) Typing sounds, Bullet shot, Person dies, God changes

References :

1) For almost all doubts:

    https://lazyfoo.net/tutorials/SDL/index.php

2) For networking:

    https://github.com/maciejspychala/sdl-game
    https://www.youtube.com/watch?v=IydkqseK6oQ
    https://www.tutorialspoint.com/difference-between-tcp-and-udp
    http://www.steves-internet-guide.com/tcp-vs-udp/

3) For maze creation:

    https://en.wikipedia.org/wiki/User:Dllu/Maze
    Introduction to Algorithms, CLRS