

ProblemSet 6
Pong

Assignment

Using the ncurses library, create a program (game, presentation or other artistic work), with the following minimal requirements:

- Project contains 2D world.
- Project meets at least 3 challenges:
 - Work with colors
 - Keyboard control (no Enter needed)
 - Multiple levels
 - Work in time (in the time the program is changed)
 - Work with command-line arguments
 - Work with files
- Project must be more complicated than the sample programs, with an adequate level of difficulty.

Game logic

The code consists of 3 functions:

- `void draw_logo()` - displays intro
- `void menu(FILE*)` - displays menu. Here you can find Instruction for game and start the game.
- `void start_game(FILE*)` - contains game loop and game logic.

The game contains playing field , 2 platforms and ball :

- 'O' - ball
- '|' - platforms

The platform consists of 3 '|' and have position:

```
Player.y-1 ; player.y ; player.y+1;
```

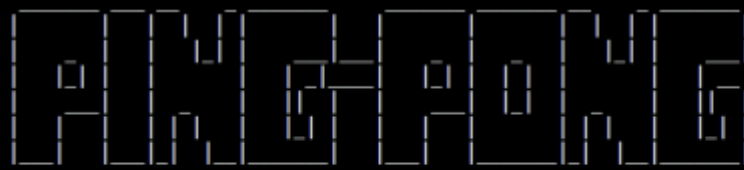
Game loop uses `usleep(timer)` for every ball move. Every time when ball moves , timer decrease by 10. This game you can play with your friend. First player moves with buttons 'w' and 's' on your keyboard , and the second one moves with 'o' and 'l'. On the right top you can find scoreboard for player2, and on the left top is scoreboard for player1. After game scoreboard will be saved in file `score.txt` and it looks like this :

```
1  Player 1 = 2
2  Player 2 = 0
```

Game play

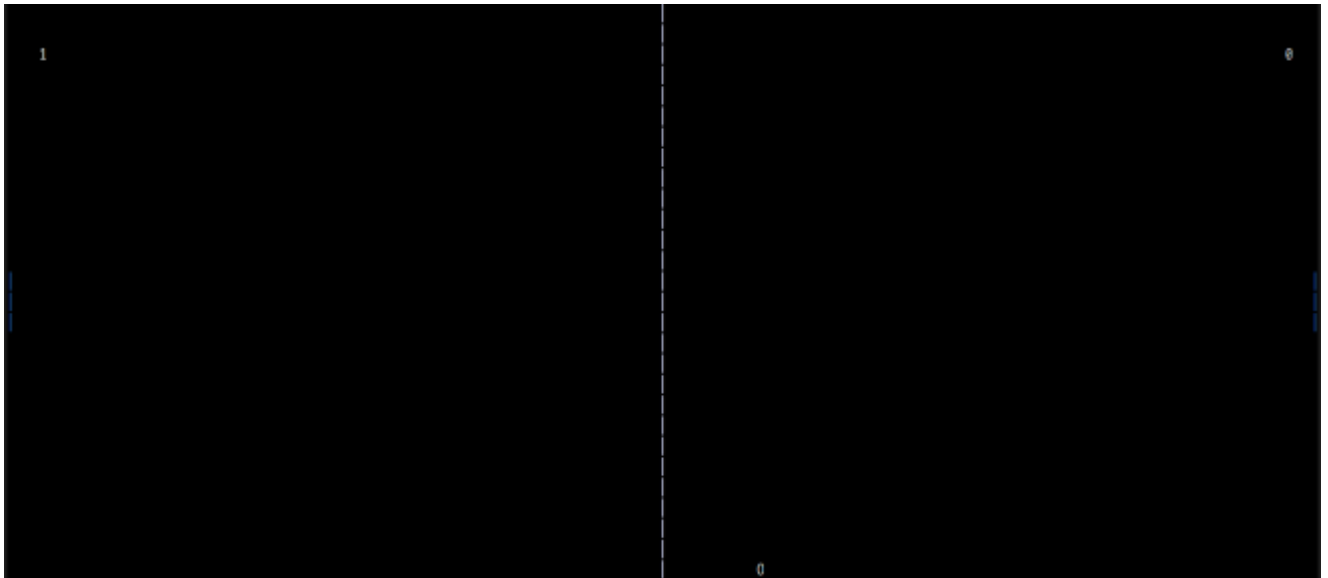
The game is entirely coded inside the program.c file. It follows the rules of Pong game , where you need to bounce the ball by 2 platforms.

As launching the game, the start screen appears. On the start you watch on Logo of the game and after logo you can choose what to do. In menu you have Start Game and Instruction for game.

The logo for the game 'ANGHONG' is displayed in a large, pixelated, white font on a black background. The letters are blocky and have a slightly irregular, hand-drawn appearance.

1. Start game
 2. Instruction for game
- Your selection:

To control left player use 'w' and 's'
To control right player use 'o' and 'l'
Have fun!
Press any key to back



You can `exit` with pressing double `ESC`.

Conclusion

You can play this game for infinity. Score can be stored in a file, making a potential to extend the game by the best scores table.