

CONNECT 4 - LCOM PROJECT

Connect 4

Our idea to this project is to implement the traditional connect 4 game, a two-player board game in which each player is associated with a color, and then, in alternate turns, the player drops a piece in a column of the board. The winner is the first player to form a line with 4 contiguous pieces of the respective color. If the board fills up, the game ends with a draw.

Functionalities:

The game will have a simple main menu with the following options:

- Start playing the game
- Go to the rules menu
- Quit the game

The rules menu will present the basic rules of the game as well as the game controls. The game itself will have a simple animation to give the idea that the pieces played are falling on the corresponding column of the board and the players will have the option to pause the game. The pause menu will have the option to go back to the main menu or to continue the current game.

Devices:

Device	Role	Interrupts
Timer	Control the game's frame rate as well as the movement of the pieces' animations	Yes
Keyboard	Select the column of each move of the game and some menu controls like ESC to pause the game	Yes
Mouse	Interaction in each menu of the program to choose an option	Yes
Video	Display all the menus and the game itself	No
RTC	Obtains the real date to display in each menu	Yes

Milestones:

Week	Milestone
09/05 - 15/05	Display main menu and control mouse movement and clicks. Handle the events triggered by a click on each button
16/05 - 22/05	Addition of the rules menu and implementation of the game logic
23/05 - 15/05	Display the game and implement the pieces's animation

Week	Milestone
30/05 - 05/06	Addition of the RTC device to the project and display the current date in each menu
06/06 - 09/06	Final adjustments of the project

LCOM Project for group t11g01

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