Faculdade de Engenharia da Universidade do Porto LCOM - Project Specification

ChessProject

A two-player strategy board game played on a virtual chessboard.

Class 1 Group 01

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Description of the modules

Timer/Counter

For measuring the time we might use the Timer 0 interrupts.

Keyboard

The kbc interrupts to enable user/machine interaction with the keyboard.

Video Card

Graphics module.

Mouse

Mouse buttons and movement.

RTC

Update in progress flag (UIP) of the RTC.

Serial Port

Serial port protocol.

Development plan

1. Set up the environment (@TomasOliveira)

Create and set a project, make useful scripts, design the folder structure and create the makefile.

2. Adding graphics (@AfonsoPinto)

The first thing we are going to do is to add some graphics to our program.

The result should be a blue screen with 2 squares.

3. Adding the timer (@TomasOliveira)

In this step we will be adding a timer implementation to our project and making it work as a coutdown.

The 2 squares should vanish after 30 seconds.

4. Adding the keyboard (@AfonsoPinto)

In this phase we are going to add keyboard features to our program: when we run it 2 square will appear, when spacebar is hit a counter starts for the first square if hitted again it stops and starts a new one in the second square.

5. Adding the mouse (@AfonsoPinto)

In this phase we will be adding a mouse implementation to our project. We will be able to left-click the squares from the previous point and make them move a bit.

[Project's preliminary demo]

6. Loading BMP Images (@AfonsoPinto)

In this step we will be replacing the blue background for the chessboard.

7. Adding chess pieces (@TomasOliveira)

Read the title.

8. Adding RTC (@TomasOliveira)

We will try to add the date and the time of the day to our game.

9. Adding Serial Port (@AfonsoPinto)

We will try to add serial communication between the 2 Players.