**Project ID: PP0011**

Description:

My project is an employee Time Clock. It is built for a small business, enabling up to 10 employees to check in and out, having their exact time of arrival and departure written to a Secure Digital (SD) card in HTML format. When you set up the time clock, you first insert the SD card into a computer and paste a new text file into it labeled "users.txt". You then list your employees, assigning numerical identifications to them, in the numbers 0-9. Then, if you wish, you may assign an avatar (picture) to them by putting them in the SD card and labeling them as: "user1.jpg", "user2.jpg", etc. When an employee checks in, he/she will enter a pound sign, followed by their ID number. To check in, they will press "A". To check out, they will press "D". To cancel the transaction (e.g. if you entered the wrong ID) you press "C". If checking in, the green LED will light to show that you have successfully been stored to the file on the SD card. If you check out, the red LED will light to show the same as described above. When the employer goes to retrieve the hours, he/she will remove the SD card from the device and place it in the media card slot in their computer. Then they simply open up the "hours.htm" file that is generated and print it out from their browser.

Schematic:

In the schematic the power and ground lines are put at the opposite end of the headers to enhance readability. The headers are labeled the same as on the Schmartboard Propeller module schematic.
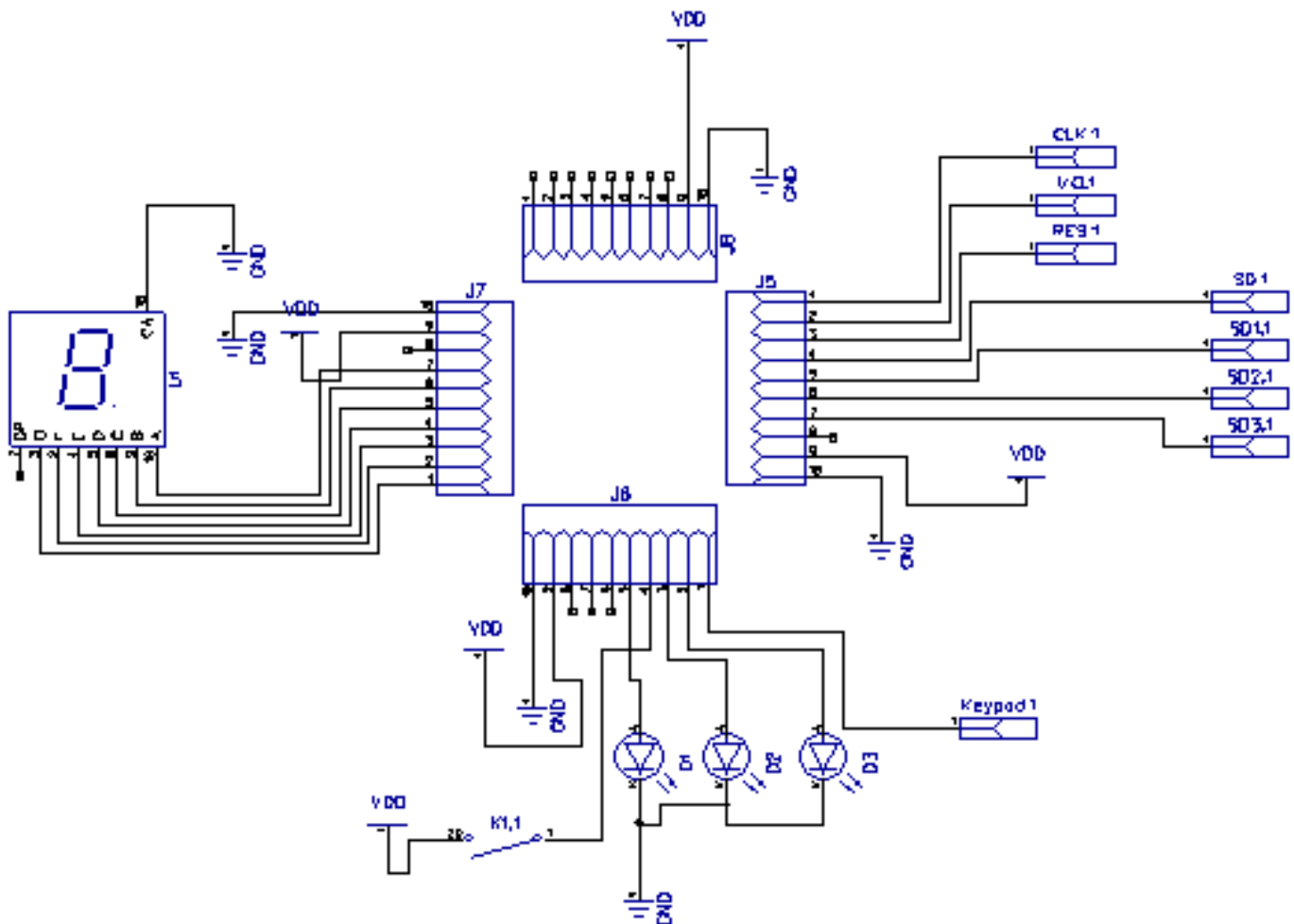
Source Code:

The source code can be found packaged with this file labeled as: "Time Clock v.5.8"

Bill of Materials:

1x Schmartboard module

1x Red LED

1x Green LED

1x Blue LED

1x 7 segment LED display

1x Parallax SD card adapter

1x DS1302

1x RTC Xtal

2x Backup batteries

2x 10 pin male headers

1x 2x2 perfboard square

1x 3 pin 14" jumper cable

1x uController.com serial keypad

1x Industrial-grade plastic enclosure (7"X3")

Wire

Pictures: