Four of a Kind

Programmer's Manual

September 2021

Table of Contents

commandhandler.c

Syntax: void commandhandler()

Description: Interprets commands entered by the user and calls the corresponding function

Parameters: none

Syntax: void help()

Description: Displays the list of available commands and what they do

Parameters: none

Syntax: void shutdown()

Description: Sends shutdown signal to the machine

Parameters: none

Syntax: void version()

Description: Displays the current version and last updated date

Parameters: none

Syntax: void error()

Description: Prints error message when invalid command is entered

Parameters: none

Syntax: int getDate()

Description: Retrieves the current date of the operating system

Parameters: none

Syntax: void SetDate(int year, int month, int day)

Description: Sets the date of the operating system

Parameters: Year - the year entered by the user

Month - the month entered by the user

Day - the day entered by the user

Syntax: void setYear(int year)

Description: Sets the current year of the operating system

Parameters: Year - the year entered by the user

Syntax: int getYear()

Description: Gets the current year of the operating system

Parameters: none

Syntax: void setMonth(int month)

Description: Sets the current month of the operating system

Parameters: Month - the month entered by the user

Syntax: int getMonth()

Description: Gets the current month of the operating system

Parameters: none

Syntax: void setDay(int day)

Description: Sets the current day of the operating system

Parameters: Day - the day entered by the user

Syntax: int getDay()

Description: Gets the current day of the operating system

Parameters: none

Syntax: void setTime(int hours, int minutes, int seconds)

Description: Sets the time of the operating system

Parameters: Hours - the hour entered by the user

Minutes - the minutes entered by the user

Seconds - the seconds entered by the user

Syntax: int getTime()

Description: Retrieves the current time of the operating system

Parameters: none

Syntax: int getHours()

Description: Retrieves the current hour of the operating system

Parameters: none

Syntax: void setHours(int hours)

Description: Sets the current hour of the operating system

Parameters: Hours - the hour entered by the user

Syntax: int getMins()

Description: Gets the current minute of the operating system

Parameters: none

Syntax: void setMin(int min)

Description: Sets the current minute of the operating system

Parameters: Min - the minute entered by the user

Syntax: int getSeconds()

Description: Gets the current second of the operating system

Parameters: none

Syntax: void setSec(int seconds)

Description: sets the current seconds of the operating system

Parameters: Seconds - the seconds entered by the user

Syntax: char *itoa(int num, char buffer[])

Description: Binary coded digit converter. Converts the time to the BCD format

Parameters: Num - the integer that will be converted to char

Buffer - the char array that will hold the converted character

Syntax: void reverse(char buffer[])

Description: Reverses a character array

Parameters: Buffer - the character array that will be reversed

Syntax: void clear()

Description: Clears the terminal screen

Parameters: none

Syntax: void menu()

Description: Prompts the user with a menu of actions they can perform

Parameters: none

serial.c

Syntax: int *polling(char *buffer, int *count)

Description: Calls on the helper function when a letter is found in the register

Parameters: *Buffer - the current user input

*Count - keeps track of where the cursor is

polling_helper.c

Syntax: int special_keys(char *buffer, int *count, char letter, int* sizePtr, int *cursorPtr)

Description: Deals with special keys entered, like arrow keys

Parameters: *Buffer - user input from terminal

*Count - how full the buffer is

Letter - the letter entered in the terminal

*SizePtr - pointer to the size of the buffer

*CursorPtr - where the cursor is in the buffer

Syntax: void backspace(char *buffer, int *count, int* sizePtr, int *cursorPtr)

Description: Enables user to delete in the terminal

Parameters: *Buffer - user input from terminal

*Count - how full the buffer is

*SizePtr - pointer to the size of the buffer

*CursorPtr - where the cursor is in the buffer