**User’s Manual**

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**Welcome to Thunder Kracken’s MPX**

MPX is an operating system created for academic purposes. Each member of the design team has taken careful steps to insure the quality of this operating system. We hope you enjoy using our operating system.

**Introduction**

As you begin to run MPX, you’ll be faced with a terminal. This terminal is the primary interface of MPX. Everything you do will come through this terminal, so it is best to get familiar with it. MPX’s terminal functions much like other terminals you may be familiar with; to write in the terminal, use the keyboard to input letters. You can edit what you have already wrote in the terminal by navigating with the left and right arrow keys in their respective directions. To undo mistakes, the backspace button removes the character to the left of the cursor and the delete button removes the character that the cursor is currently highlighting. Once you are familiar with the input, you are ready to use MPX. Using MPX requires the ability to input commands to execute functions. These commands are listed below.

**Commands**

This section is comprised of different commands to be used in the terminal. Each command is formatted with its name followed by a colon and then it’s syntax. Note that square brackets indicate an optional clause.

getdate: mpx getdate

Displays the current date to the user in format month/day/year.

Exit Status: Always succeeds.

gettime: mpx gettime

Displays the current time to the user in format hours:minutes:seconds.

Exit Status: Always succeeds.

help: help [command]

If used alone, displays usage instructions for every command or when used with an individual command, gives a detailed summary of how to use that command.

Arguments:

command The command to be described

Exit Status:

Returns success unless the given command is not a valid command.

resume: mpx resume PROCESS

Puts the given process into the unsuspended state.

Arguments:

PROCESS The name of the process to be unsuspended.

Exit Status: Return Success unless the given name does not apply to any process.

setdate: mpx setdate MM/DD/YYYY

Allows the user to set the date to a given date.

Arguments:

MM Specified month must be two digits long.

DD Specified day must be two digits long.

YYYY Specified year must be four digits long.

Exit Status: Return success unless the given month, day, or year is an incorrect value.

Setpriority: mpx setpriority PROCESS PRIORITY

Allows the user to change the priority of a process.

Arguments:

PROCESS The name of the process

PRIORITY The new priority value (Must be a digit 0 – 9)

Exit Status Return success unless there is no process by the given name, priority is not a digit 0-9, or the process already has the given priority.

settime: mpx settime HH:MM:SS

Allows the user to set the time to a given time.

Arguments:

HH Specified hours ranging from 00 (midnight) to 23 (1AM).

MM Specified minutes.

SS Specified seconds.

Exit Status: Return success unless the given time is invalid values.

shutdown: mpx shutdown

Shuts down the operating system.

Exit Status: Always succeeds.

showall: mpx showall

Shows all processes and their attributes.

Exit Status: Always succeeds.

showblocked: mpx showblocked

Shows all blocked processes and their attributes.

Exit Status: Always succeeds.

showpcb: mpx showpcb PROCESS

Shows all of the attributes of a given PCB

Attributes:

PROCESS The name of the process to be shown.

Exit Status: Returns success unless there is no process by the given name.

showready: mpx showready

Shows all ready processes and their attributes.

Exit Status: Always succeeds.

suspend: mpx suspend PROCESS

Puts the given process into the suspended state.

Arguments:

PROCESS The name of the process to be suspended.

Exit Status: Return Success unless the given name does not apply to any process

version: mpx version

Prints the current version of MPX and completion date.