

User Manual for MPX Core

Version: R5



Group 9
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getdate

Purpose- returns the stored date in the form:

dayOfWeek day month year (4 digits)

Usage- getdate

Example-

input getdate

output- Mon 8 Feb 2021

gettime

Purpose- returns the stored time in 24 hour form:

hours:minutes:seconds

Usage- gettime

Example-

input- gettime

output- 13:27:56

help

Purpose- returns usage assistance for a specified command

Usage- help [command]

Example-

input- help gettime

output- GETTIME HELP PAGE

Usage: gettime

Description: Displays the current time in 24hr format

[hour:minute:seconds]

setdate

Purpose- change the stored date in the form of:

dayOfWeek day month year (4 digits)

Usage- setdate [dayOfWeek] [day] [month] [year]

Example-

input- setdate Mon 8 Feb 2021

output (when getdate is used)- Mon 8 Feb 2021

settime

Purpose- change the stored time in 24 hour form:

hours:minutes:seconds

Usage- settime [hours]:[minutes]:[seconds]

Example-

Input- settime 12:20:45

output (when gettime is used)- 12:20:45

shutdown

Purpose- exits the program

Usage- shutdown

Example-

input- shutdown

output- Are you sure you want to shutdown? Y N

input- Y

output- Starting system shutdown procedure...

version

Purpose- displays the current version of the program

Usage- version

Example-

input-version

output- Version R2

suspend

Purpose- places the PCB into the suspended state and reinserts into the appropriate queue

Usage- suspend [process name]

Example-

input- suspend

example result- (Changes PCB's state to suspended)

resume

Purpose- Places PCB into the not suspended state and reinserts it into the appropriate queue

Usage- resume [process name]

Example-

input- resume

example result- (Changes PCB's state to not suspended)

set priority

Purpose- Sets a PCB's priority (range 0-9) and reinserts the process into the correct place in the correct queue

Usage- set priority [process name] [priority value]

Example-

input- set priority example 5

result – (Changes PCB's priority and reinserts the process into the correct place in the correct queue)

show

Purpose- displays the attributes for a PCB

Usage- show [process name]

Example-

input- show example

output-

Process name: example

Class: System

Priority: 4

State: Ready

Suspended Status: Not Suspended ----- 5

show all

Purpose- shows all of the PCB's in all queues

Usage- show all

Example-

input show all

output- (will print the attributes of all PCB's)

show ready

Purpose- displays all PCB's in the ready queue

Usage- show ready

Example-

input- show ready

output-

READY NOT SUSPENDED

(PRINTS READY NOT SUSPENDED PCB LIST)

READY SUSPENDED

(PRINTS READY SUSPENDED PCB LIST)

show blocked

Purpose- display all PCB's in the blocked queue

Usage- show blocked

Example-

input- show blocked

output-

```
BLOCKED NOT SUSPENDED
*****
(PRINTS BLOCKED NOT SUSPENDED PCB LIST)
*****
```

```
BLOCK SUSPENDED
*****
(PRINTS BLOCK SUSPENDED PCB LIST)
*****
```

delete PCB

Purpose- removes PCB from the appropriate queue and frees all associated memory

Usage- delete PCB [process name]

Example- input- delete PCB

example

result- (deletes PCB and frees all associated memory)

alarm

Sets an alarm on the system that will display the message at or after the specific time.

Usage- alarm “[message]” hh:mm:ss

Example-

input- alarm hello 10:20:00
result- (a new alarm is created with the specified message)

loadr3

Loads 5 test processes (only in R3)

Usage- loadr3

Example-

input- loadr3
result- (5 processes are suspended in a suspended state)

show free memory

Purpose- The function traverse the list that will show the address of the block as well as the size of the block.

Usage- show free memory

Example-

input- show free memory
output-

```
-----  
MCB Type: free  
Beginning address: 2256  
Block Size: 47744  
-----
```

show allocated memory

Purpose- The function traverse the list that will show the address of the block as well as the size of the block.

Usage- show allocated memory

Example-
input- show allocated memory

output-

MCB Type: allocated
Beginning address: 0
Block Size: 1076

MCB Type: allocated
Beginning address: 1128
Block Size: 1076
