User Manual for

MPX Core

Version: R2

Group 9

2/25/2021

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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 [dayOfWeek] [day] [month] [year]

Example-

input- setdate Mon 8 Feb 2021

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

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 R1

suspend

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

Usage- suspend [process name]

Example-

input- suspend abcdefgh

output- PCB is already suspended!

resume

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

Usage- resume [process name]

Example-

input- resume abcdefgh

output- PCB is already not suspended!

set priority

Purpose- Sets a PCB's priority and reinserts the process into the correct place in the correct queue

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

Example-

input- set priority abcdefgh 10

output- priority out of bounds! Range: 0-9

show

Purpose- displays the attributes for a PCB

Usage- show [process name]

Example-

input- show abcdefgh

output-
Process name: abcdefgh
Class: System
Priority: 4
State: Ready
Suspended Status: Not Suspended
---

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 is 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)
****

create PCB

Purpose- creates a PCB and inserts to the appropriate queue

Usage- create PCB [process name] [class] [priority value]

Example-

input- create PCB abcdefgh 1 5

result- (creates PCB and inserts it to the appropriate queue)

delete PCB

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

Usage- delete [process name]

Example-

input- delete PCB abcdefgh

result- (deletes PCB and frees all associated memory)

block

Purpose- finds PCB and sets it state to blocked and reinserts it into the appropriate queue

Usage- block [process name]

Example-

input- block abcdefgh

result- (sets the PCB state to blocked and reinserts it into the appropriate queue)

unblock

Purpose- finds PCB and sets it state to unblocked and reinserts it into the appropriate queue

Usage- unblock [process name]

Example-

input- unblock abcdefgh

result- (sets the PCB state to unblocked and reinserts it into the appropriate queue)