Nama : Ridwan Syah

NIM : 1313618016

Prodi : Ilmu Komputer 2018

Code Modification Report

Makefile

Line 16 :

```
CS333_UPROGS += _date
```

syscall.c

Line 109-112 :

```
#ifdef CS333_P1
// internally, the function prototype must be ’int’ not ’uint’ for sys_date()
extern int sys_date(void);
#endif // CS333_P1
```

Line 139-141 :

```
#ifdef CS333_P1
[SYS_date]    sys_date,
#endif // CS333_P1
```

Line 182-185 :

```
    #ifdef PRINT_SYSCALLS
    cprintf("%s -> %d\n",
            syscallnames[num], curproc->tf->eax);
    #endif
```

syscall.h

Line 24 :

```
#define SYS_date    SYS_halt+1
```

sysproc.c

Line 101-111 :

```
#ifdef CS333_P1
int
sys_date(void)
{
  struct rtcdate *d;
```

```
  if (argptr(0, (void*)&d, sizeof(struct rtcdate)) < 0)
    return -1;
  cmostime(d);
  return 0;
}
#endif
```

proc.c

Line 151 :

```
p->start_ticks = ticks;
```

Line 566-571 :

```
  #ifdef CS333_P1
  int elapsed_ms = ticks - p->start_ticks;
  int elapsed_scnd = elapsed_ms / 1000;
  int elapsed_div = elapsed_ms % 1000;
  cprintf("%d\t%s\t%d.%d\t%s\t%d", p->pid, p-
>name, elapsed_scnd, elapsed_div, state_string, p->sz);
  #endif
```

proc.h

Line 52 :

```
  uint start_ticks;
```

user.h

Line 28-30 :

```
#ifdef CS333_P1
int date(struct rtcdate*);
#endif // CS333_P1
```

usys.s

Line 33 :

SYSCALL(date)