

Afny

1313618001

Ilmu Komputer 2018

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### File yang dimodifikasi

- **Makefile**

Line 3-4 :

```
CS333_PROJECT ?= 1      (Merubah dari 0 menjadi 1)
PRINT_SYSCALLS ?= 1     (Merubah dari 0 menjadi 1)
```

Line 16

```
CS333_UPROGS += _date    (Menghapus tanda #)
```

- **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
```

Line 183-186 :

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

- **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 //
```

- **user.h**

Line 29-31 :

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

- **usys.S**

Line 33 :

SYSCALL(date)

- **syscall.h**

Line 24 :

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

- **proc.h**

Line 53-55 :

```
#ifdef CS333_P1
    uint start_ticks;
#endif
```

- **proc.c**

Line 151-153 :

```
#ifdef CS333_P1
    p->start_ticks = ticks;
#endif
```

Line 568-569

```
uint elapsed_ms = ticks - p->start_ticks;
    cprintf("%d\t%s\t\t%d.%d\t%s\t%d\t", p->pid, p-
>name, elapsed_ms/1000, elapsed_ms%1000, state_string, p->sz);
```