ASSIGNMENT 1 OPERATING SYSTEM

CODE MODIFICATION REPORT

ZAKIYAH HAMIDAH (1313618017) – ILMU KOMPUTER 2018

➢ Makefile

(Line 3 - 4)

```
CS333_PROJECT ?= 1                set sesuai keperluan
PRINT_SYSCALLS ?= 0               set sesuai keperluan
```

(Line 16)

```
CS333_UPROGS +=_date
```

➢ syscall.c

(Line 187 – 189 = System Call Tracing)

```
#ifdef CS333_P1
    cprintf("%s -> %d\n",syscallnames[num],curproc->tf->eax);
#endif //CS333_P1
```

(Line 109 – 111 = Adding A New System Call)

```
#ifdef CS333_P1
    extern int sys_date(void);
#endif //CS333_P1
```

(Line 138 – 140 = Adding A New System Call)

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

(Line 169 – 171 = Adding A New System Call)

```
#ifdef CS333_P1
    [SYS_date]    "date",
#endif //CS333_P1
```

➢ syscall.h

(Line 24)

```
#define SYS_date    SYS_halt+1        //CS333_P1
```

➢ sysproc.c

(Line 101 - 114)

```
#ifdef CS333_P1
 int
 sys_date(void)
 {
      struct rtcdate *d;
      if (argptr(0, (void*)&d, sizeof(struct rtcdate)) < 0){
           return -1;
      }
      else{
           cmostime(d);
           return 0;
      }
  }
#endif //CS333_P1
```

➢ usys.S

(Line 33)

```
SYSCALL(date)
```

➢ user.h

(Line 46 - 48)

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

➢ proc.h

(Line 52 - 54)

```
#ifdef CS333_P1
    uint start_ticks;          // ticks global
#endif //CS333_P1
```

➢ proc.c

(Line 151 – 153 = Control P)

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

(Line 564 – 577 = Control P)

```
#elif defined CS333_P1
  void
  procdumpP1(struct proc *p, char *state_string)
  {
        uint elapsed;
        uint sec;
       uint millsec;

       elapsed = ticks - p->start_ticks;
       sec = (elapsed / 1000);
```

```
        millsec = (elapsed % 1000);
        cprintf("%d\t%s\t\t%d.%d\t%s\t%d\t", p->pid,p->name,sec,millsec,state_string,p->sz);
    }
#endif //CS333_P1
```