

소프트웨어공학개론

Coffee Machine(System Test)



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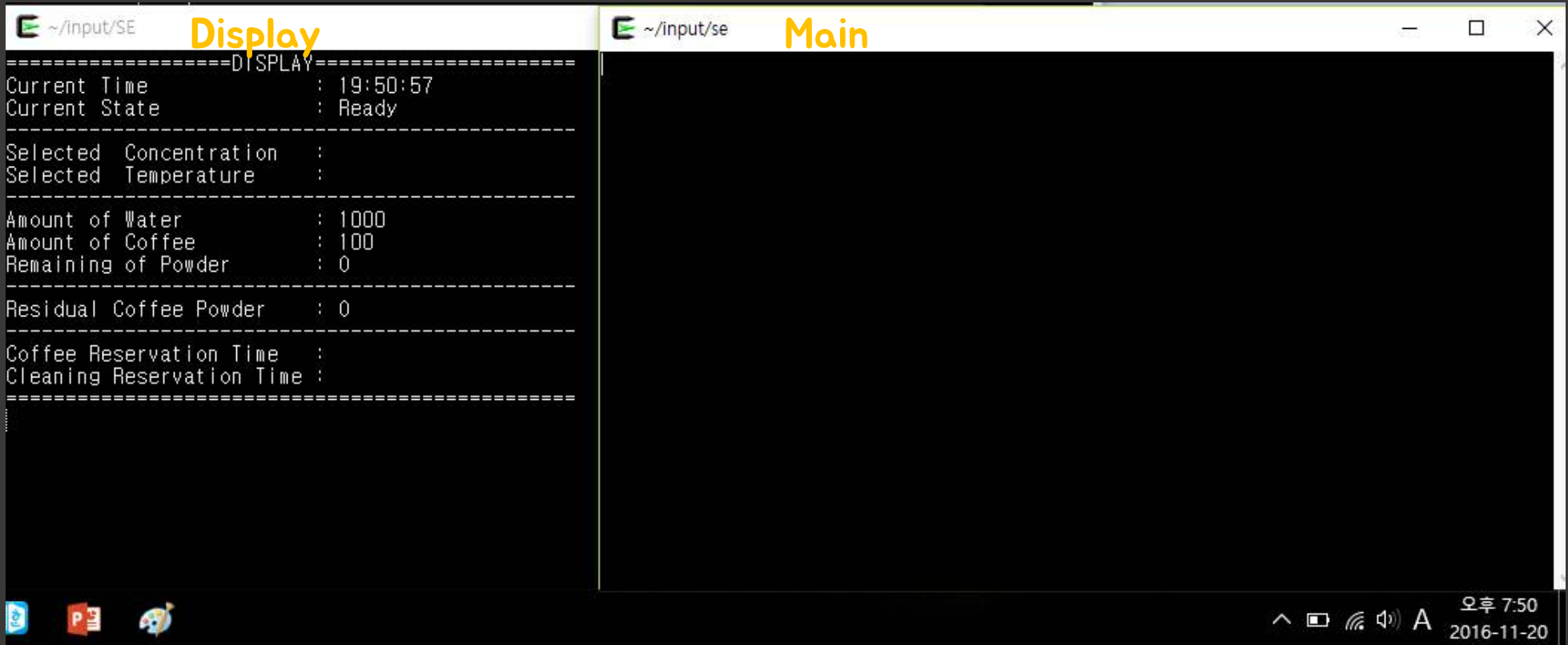
201211938 황준익

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System Implementation

Initial Display



```
~/input/SE Display
=====DISPLAY=====
Current Time      : 19:50:57
Current State    : Ready
-----
Selected Concentration :
Selected Temperature  :
-----
Amount of Water      : 1000
Amount of Coffee     : 100
Remaining of Powder  : 0
-----
Residual Coffee Powder : 0
-----
Coffee Reservation Time :
Cleaning Reservation Time :
=====
```

The screenshot shows a terminal window with a black background and white text. The window title is "~/input/SE Display". The text is formatted with dashed lines to separate sections. The first section shows the current time and state. The second section shows selected concentration and temperature. The third section shows the amount of water, coffee, and remaining powder. The fourth section shows the residual coffee powder. The fifth section shows coffee and cleaning reservation times. The window is part of a desktop environment with a taskbar at the bottom showing icons for a folder, a presentation, and a globe. The system tray on the right shows network, volume, and system icons, along with the date and time "오후 7:50 2016-11-20".

Input Display

```
~/input/SE Display
=====DISPLAY=====
Current Time      : 20: 8:37
Current State    : Ready
-----
Selected Concentration :
Selected Temperature  :
-----
Amount of Water      : 1000
Amount of Coffee     : 100
Remaining of Powder  : 0
-----
Residual Coffee Powder : 0
-----
Coffee Reservation Time :
Cleaning Reservation Time :
=====

~/input/se Main
=====
버튼을 선택하세요.
-----
1      | 추출
2      | 청소
3      | 예약
4      | 예약
5      | 종료
0      | 종료
-----
==> |

오후 8:08
2016-11-20
```

Setting Display

The screenshot shows a terminal window with two panes. The left pane is titled 'Display' and shows a menu of settings. The right pane is titled 'Main' and shows a menu for selecting temperature and concentration.

```
~/input/SE Display
=====DISPLAY=====
Current Time      : 20:10:23
Current State    : Setting
-----
Selected Concentration :
Selected Temperature  :
-----
Amount of Water      : 1000
Amount of Coffee     : 100
Remaining of Powder  : 0
-----
Residual Coffee Powder : 0
-----
Coffee Reservation Time :
Cleaning Reservation Time :
=====

~/input/se Main
=====
온도 선택
-----
1      |      100도
2      |      150도
-----
==> 1
-----
농도 선택
-----
1      |      연하게
2      |      보통
3      |      진하게
-----
==> 3|
=====
```

At the bottom of the terminal, there is a taskbar with icons for a file manager, a presentation, and a globe. On the right side of the taskbar, there are system icons for network, volume, and power, along with the date and time: '오후 8:10 2016-11-20'.

Reservation Display

```
~/input/SE Display
=====DISPLAY=====
Current Time      : 20:11: 5
Current State    : Reservating
-----
Selected Concentration : Strong
Selected Temperature  : Cold
-----
Amount of Water      : 1000
Amount of Coffee     : 100
Remaining of Powder  : 0
-----
Residual Coffee Powder : 0
-----
Coffee Reservation Time :
Cleaning Reservation Time :
=====

~/input/se Main
=====
예약 작업 선택
-----
1      | 추출
2      | 청소
-----
==> 1
-----
예약 시간 입력
-----
==> 2013
=====
```



Refilling Display

```
~/input/SE Display
=====DISPLAY=====
Current Time      : 20:12: 7
Current State    : Refilling
-----
Selected Concentration : Strong
Selected Temperature  : Cold
-----
Amount of Water      : 1000
Amount of Coffee     : 100
Remaining of Powder  : 0
-----
Residual Coffee Powder : 0
-----
Coffee Reservation Time : 20 : 13
Cleaning Reservation Time :
=====

~/input/se Main
=====
물 보충량 입력 (0 ~ 10)
==> 3
=====
원두 보충량 입력 (0 ~ 10)
==> 1
=====
가루 제거 (Y / N)
사용 여부 : 0
=====
==> y
```

오후 8:12
2016-11-20

Test List

Test List

Identifier	Input Specification	Output Specification
CMS_STP_000_000	커피 추출 명령 - Concentration; Ice	state.txt (3, 1) 입력 -> 커피 추출 (10 sec) -> state.txt (0, 0) 입력
CMS_STP_000_001	커피 추출 명령 - Concentration; Hot	State.txt (1, 1) 입력 -> 분쇄 (10 sec) -> state.txt (3, 1) 입력 -> 커피 추출 (10 sec) -> state.txt (0, 0) 입력
CMS_STP_001_000	커피 추출 동작 중 청소 버튼 입력	동작 X
CMS_STP_001_001	머신 청소 동작 중 추출 버튼 입력	동작 X
CMS_STP_001_002	세팅 정보 미 입력 상태로 추출 버튼 입력	warning_flag.txt (4) 입력 -> syntax error warning -> warning_flag.txt (0) 입력

Test List

Identifier	Input Specification	Output Specification
CMS_STP_002_000	온도, 농도 설정 – Hot, Strong	setting.txt (2, 3) -> Display 출력
CMS_STP_003_000	커피 추출 예약 – 시간 ; 1820	reservation.txt (1, 1820) 입력 -> Display 출력
CMS_STP_003_001	머신 청소 예약 – 시간 ; 0837	reservation.txt (2, 837) 입력 -> Display 출력
CMS_STP_003_002	Ready 중 추출 예약 시간 일치	CMS_STP_000 실행
CMS_STP_003_003	Ready 중 청소 예약 시간 일치	CMS_STP_007 실행
CMS_STP_003_004	작업 중 추출 예약 시간 일치	진행 중인 작업 종료 후 CMS_STP_003_002 실행
CMS_STP_003_005	작업 중 청소 예약 시간 일치	진행 중인 작업 종료 후 CMS_STP_003_003 실행

Test List

Identifier	Input Specification	Output Specification
CMS_STP_003_006	여러 개의 예약 입력	reservation.txt – 시간 순서대로 예약 정렬 Display 화면에 가장 빠른 예약 출력
CMS_STP_004_000	커피 가루 없을 때 커피 추출 요청	state.txt (2, 1) 입력 -> CMS_STP_000 실행
CMS_STP_005_000	커피 추출 후 재료 감소	ingredient.txt – 재료 정보 변경 후 입력 Display 화면에 변경된 재료 정보 출력
CMS_STP_006_000	청소 후 재료 감소	Ingredient.txt – 물 잔여량 감소시킨 후 출력 Display 화면에 변경된 재료 정보 출력
CMS_STP_007_000	재료 충전 요청	Ingredient.txt – 입력 값에 따라 재료 정보 변경 후 입력 Display 화면에 변경된 재료 정보 출력

Test List

Identifier	Input Specification	Output Specification
CMS_STP_008_000	추출 / 작업 요청 시 물 부족	Display 화면에 Water Lack 출력 warning_flag.txt (1) 입력
CMS_STP_008_001	추출 요청 시 원두 부족	Display 화면에 Bean Lack 출력 warning_flag.txt (2) 입력
CMS_STP_008_002	추출 요청 시 찌꺼기 잔여	Display 화면에 Powder Remained 출력 warning_flag.txt (3) 입력
CMS_STP_008_003	버튼 입력 시 허용 범위 외 입력	Display 화면에 Syntax Error 출력 warning_flag.txt (4) 입력
CMS_STP_009_000	전원 OFF 후 전원 ON	재료 정보 외의 정보 초기화

Q & A

Thank You!!