

Software System testing Report

김의섭

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Introduction

- Objective
 - 본 문서는 소프트웨어 공학 개론 B반 T4 팀이 개발한 Digital watch system을 위한 문서이다.

- Reference
 - SRS Ver. DS-2012.DWS.SRS-2.1 (2012-08-17)
 - B. T4 SRA Ver. 6.0
 - B. T4 SDS Ver. 3.0

System test case specification

Identifier	Input Specification	Output Specification
ST.000.000	Initial state	01-01 00:00:00
ST.000.001	N/A	01-01 00:00:00 ~ 12-31 11:59:59 (시간증가확인)
ST.000.002	N/A	2099 12-31 11:59:59 -> 2012 01-01 00:00:00 (시간증가확인)
ST.000.003	d	색 변경 (Back light)
TimeKeeping mode		
ST.001.000	a	01-01 00:00: <u>00</u> (초 설정)
ST.001.001	a, d	01-01 00:00: <u>00</u> , 색 변경(Back light)
ST.001.002	a, a	01-01 00:00:00 (TK mode 복귀)
ST.002.000	a, b	01-01 00:00: <u>01</u> (초 증가)
ST.002.001	a, b x 13	01-01 00:00: <u>13</u> (초 증가)
ST.002.002	a, b x 60	01-01 00:00: <u>00</u> (59 초과시 00)
ST.003.000	a, c	01-01 <u>00</u> :00:00 (수정대상 변경)
ST.003.001	a, c, d	01-01 <u>00</u> :00:00, 색 변경 (Back light)
ST.003.002	a, c, b	01-01 <u>01</u> :00:00 (시간 증가)
ST.003.003	a, c, b x 6	01-01 <u>06</u> :00:00 (시간 증가)
ST.003.004	a, c, b x 13	01-01 <u>12</u> :00:00, PM indicator on (오후시간 표시)
ST.003.005	a, c, b x 23	01-01 <u>01</u> :00:00, PM indicator on (1시 변경)
ST.003.006	a, c, b x 23	01-01 <u>00</u> :00:00, PM indicator off (오전시간 표시)
ST.003.007	a, c, a	01-01 00:00:00, (TK mode 복귀)
ST.003.008	a, c, a, a	01-01 00:00: <u>00</u> (TK mode 복귀 후 초 설정)

System test case specification

Identifier	Input Specification	Output Specification
ST.004.000	a, c, c	01-01 00:00:00 (수정대상 변경)
ST.004.001	a, c, c, d	01-01 00:00:00, 색 변경 (Back light)
ST.004.002	a, c, c, b	01-01 00:01:00 (분 증가)
ST.004.003	a, c, c, b x 58	01-01 00:59:00 (분 증가)
ST.004.004	a, c, c, b x 59	01-01 00:00:00 (59 초과시 00)
ST.005.000	a, c, c, d	년도 수정은 제외
ST.005.001	a, c, c, a	01-01 00:00:00, 색 변경 (Back light)
ST.005.002	a, c, c, c	01-01 00:00:00 (TK mode 복귀)
ST.006.000	a, c, c, c, d	01-01 00:00:00 (수정대상 변경)
ST.006.001	a, c, c, c, d	01-01 00:00:00, 색 변경 (Back light)
ST.006.002	a, c, c, c, a	01-01 00:00:00 (TK mode 복귀)
ST.006.003	a, c, c, c, b	02-01 00:00:00 (월 증가)
ST.006.004	a, c, c, c, b x 11	12-01 00:00:00 (월 증가)
ST.006.005	a, c, c, c, b x 12	01-01 00:00:00 (12 초과시 01)
ST.007.000	a, c, c, c, c	01-01 00:00:00 (수정대상 변경)
ST.007.001	a, c, c, c, c, d	01-01 00:00:00, 색 변경 (Back light)
ST.007.002	a, c, c, c, c, a	01-01 00:00:00 (TK mode 복귀)

System test case specification

Identifier	Input Specification	Output Specification
ST.007.000	a, c, c, c, c, c, b	01-02 00:00:00, 요일 변경 (일 증가)
ST.007.001	a, c, c, c, c, c, b x 7	01-08 00:00:00, 요일 복귀 (요일 변경 확인)
ST.007.002	a, c, c, c, c, c, b x 32	01-01 00:00:00 (31 초과시 01)
ST.007.003	a, c, c, c, c, c, c	01-01 00:00:00 (초 설정 복귀)
Stopwatch mode		
ST.008.000	c	01-01 00:00:00, ST indicator on
ST.008.001	c, d	01-01 00:00:00, ST indicator on
ST.008.002	c, a	01-01 00:00:00, ST indicator on
ST.008.003	c, b	00:00, 시간진행, ST indicator on
ST.008.004	c, b, b	00:00, 시간정지, ST indicator on
ST.008.005	c, b, d	00:00, 시간진행, ST indicator on
ST.008.006	c, b, a	00:00, Lap time, ST indicator on
ST.008.007	c, b, a x n (n>2)	00:00, New Lap time, ST indicator on
ST.008.008	c, b, a x n (n>2), d	00:00, New Lap time, ST indicator on 색 변경
ST.008.009	c, b, a x n (n>2), b	00:00, 시간진행, ST indicator on
ST.008.010	c, b, a x n (n>2), b, b	00:00, 시간정지, ST indicator on
ST.008.011	c, b, a x n (n>2), b, b	00:00, 00:00:00, ST indicator on
ST.008.012	c, b, b, a	00:00, 00:00:00, ST indicator on

System test result

- 2099년 12월 31일 PM11시 59분 59초 다음에 2100년이 나왔습니다.
 - 코드에 오타가 있는 것 같습니다.
- 모든 Test Case가 문제없이 잘 동작하였습니다.

```

}
if(a->Month>=2100)
{
    a->Year=2012;
}

```

Identifier	Input Specification	Output Specification
ST.000.002		FAIL
Other		PASS