

Unit Test Report for Coffee Machine System

- Test Cases Specification
- Test Summary Report

Project Team

Team 3

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Team Information

201211335 김윤식

201311281 송종원

201411317 조민규

201511282 이재승

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1 Introduction

1.1 Objectives

본 문서는 2016년 건국대학교의 소프트웨어공학 개론 강의의 실습과제를 설명한다. 실습 과제는 coffee machine을 소프트웨어로 구성된 가상의 시스템으로 구현하는 것이다

1.2 References

[2016SE_B][T3]SRA ver 5.0

[2016SE_B][T3]SDA ver 4.0

2 Unit test case specification

2.1 Test case specification identifier

< Table1 Test Design Identification >

Identifier	Feature(Process DFD)	Valid / Invalid value
TEAM3_CMS_0_000_000	2 Calculator	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : True material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_001	2 Calculator	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_002	2 Calculator	select(Overall Data) : 1 convertedExtractData(Overall Data) : True

		wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_003	2 Calculator	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 10
TEAM3_CMS_0_000_004	2 Calculator	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 5
TEAM3_CMS_0_000_005	2 Calculator	select(Overall Data) : 2 wait(current Data) : True converted Concentration Data (Overall Data) : 200
TEAM3_CMS_0_000_006	2 Calculator	select(Overall Data) : 3 wait(current Data) : True converted Temperature Data (Overall Data) : True
TEAM3_CMS_0_000_007	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 1 convertedMaterialData.bean (Overall Data) : 50

		material.bean (current Data) : 40
TEAM3_CMS_0_000_008	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 1 convertedMaterialData.bean (Overall Data) : 50 material.bean (current Data) : 60
TEAM3_CMS_0_000_009	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 2 material.powder (current Data) : False
TEAM3_CMS_0_000_010	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 2 material.powder (current Data) : True
TEAM3_CMS_0_000_011	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 3 convertedMaterialData.water (Overall Data) : 500 material.water (current Data) : 400
TEAM3_CMS_0_000_012	2 Calculator	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 3 convertedMaterialData.water (Overall Data) : 500 material.water (current Data) : 600
TEAM3_CMS_0_000_013	2 Calculator	select(Overall Data) : 5 wait(current Data) : True convertedCleanData(Overall Data) : True material.water (current Data) : 600
TEAM3_CMS_0_000_014	2 Calculator	select(Overall Data) : 5

		wait(current Data) : True convertedCleanData(Overall Data) : True material.water (current Data) : 400
TEAM3_CMS_0_000_015	2 Calculator	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 disposal(current Data) : True material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_016	2 Calculator	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 disposal(current Data) : False material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_017	2 Calculator	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 convertedReservationData.time.hour (Overall Data) : 10 convertedReservationData.time.minute (Overall Data) : 10 convertedReservationData.time.second

		(Overall Data) : 10 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10
TEAM3_CMS_0_000_018	2 Calculator	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 convertedReservationData.time.hour (Overall Data) : 10 convertedReservationData.time.minute (Overall Data) : 10 convertedReservationData.time.second (Overall Data) : 10 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 10
TEAM3_CMS_0_000_019	2 Calculator	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 5
TEAM3_CMS_0_000_020	2 Calculator	select(Overall Data) : 6 wait(current Data) : True

		<p>convertedReservationData.clean (Overall Data) : True</p> <p>convertedReservationData.r_mode (Overall Data) : 2</p> <p>convertedReservationData.time.hour (Overall Data) : 10</p> <p>convertedReservationData.time.minute (Overall Data) : 10</p> <p>convertedReservationData.time.second (Overall Data) : 10</p> <p>material.water(current Data) : 600</p>
TEAM3_CMS_0_000_021	2 Calculator	<p>select(Overall Data) : 6</p> <p>wait(current Data) : True</p> <p>convertedReservationData.clean (Overall Data) : True</p> <p>convertedReservationData.r_mode (Overall Data) : 2</p> <p>convertedReservationData.time.hour (Overall Data) : 10</p> <p>convertedReservationData.time.minute (Overall Data) : 10</p> <p>convertedReservationData.time.second (Overall Data) : 10</p> <p>material.water(current Data) : 400</p>
TEAM3_CMS_0_000_022	2 Calculator	<p>select(Overall Data) : 7</p> <p>wait(current Data) : True</p> <p>convertedCancelData (overall Data) : True</p>
TEAM3_CMS_0_000_023	2 Calculator	<p>select(Overall Data) : 8</p> <p>wait(current Data) : True</p> <p>convertedRemoveData(Overall Data) : True</p> <p>disposal(current Data) : True</p>
TEAM3_CMS_0_000_024	2 Calculator	<p>select(Overall Data) : 8</p> <p>wait(current Data) : True</p> <p>convertedRemoveData(Overall Data) : True</p> <p>disposal(current Data) : False</p>

TEAM3_CMS_0_000_025	2 Calculator	select(Overall Data) : 9 wait(current Data) : True convertedTerminateData(Overall Data) : True
TEAM3_CMS_0_001_000	3.1.1 State Controller	mode(calculated Data) : 0 wait(current Data) : True index(Test) : 11
TEAM3_CMS_0_001_001	3.1.1 State Controller	mode(calculated Data) : 1 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_002	3.1.1 State Controller	mode(calculated Data) : 2 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_003	3.1.1 State Controller	mode(calculated Data) : 3 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_004	3.1.1 State Controller	mode(calculated Data) : 4 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_005	3.1.1 State Controller	mode(calculated Data) : 5 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_006	3.1.1 State Controller	mode(calculated Data) : 6 wait(current Data) : True wait(calculated Data) : False reservation.r_mode(calculated Data) : 1 reservation.extract(calculated Data) : True index(Test) : 11
TEAM3_CMS_0_001_007	3.1.1 State Controller	mode(calculated Data) : 6 wait(current Data) : True wait(calculated Data) : False

		reservation.r_mode(calculated Data) : 2 reservation.clean(calculated Data) : True index(Test) : 11
TEAM3_CMS_0_001_008	3.1.1 State Controller	mode(calculated Data) : 7 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_009	3.1.1 State Controller	mode(calculated Data) : 8 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_010	3.1.1 State Controller	mode(calculated Data) : 9 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_011	3.1.1 State Controller	mode(calculated Data) : 10 wait(current Data) : True wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_012	3.1.1 State Controller	mode(calculated Data) : 1 wait(current Data) : False wait(calculated Data) : False index(Test) : 11
TEAM3_CMS_0_001_013	3.1.1 State Controller	mode(calculated Data) : 9 wait(current Data) : True wait(calculated Data) : True index(Test) : 11
TEAM3_CMS_0_001_014	3.1.1 State Controller	mode(calculated Data) : 9 wait(current Data) : False wait(calculated Data) : True index(Test) : 11
TEAM3_CMS_0_002_000	3.1.2 Wait	wait(current Data) : True mode(current Data) : 0
TEAM3_CMS_0_003_000	3.1.3 Extract	temperature(current Data) : False water(current Data. material) : 100

		bean(current Data.material) : 90 powder (current Data.material) : True disposal(current Data) : False water(calculated Data) : 50 bean(calculated Data.material) : 80 powder(calculated Data.material) : True disposal(calculated Data) : True test : 0
TEAM3_CMS_0_003_001	3.1.3 Extract	temperature(current Data) : False powder(calculated Data.material) : False test : 0
TEAM3_CMS_0_003_002	3.1.3 Extract	temperature(current Data) : True powder(calculated Data.material) : False test : 0
TEAM3_CMS_0_003_003	3.1.3 Extract	temperature(current Data) : True powder(calculated Data.material) : True test : 0
TEAM3_CMS_0_004_000	3.1.4 Concentration	concentration(Calculated Data) : 100
TEAM3_CMS_0_005_000	3.1.5 Temperature	temperature(calculated Data) : False
TEAM3_CMS_0_005_001	3.1.5 Temperature	temperature(calculated Data) : True
TEAM3_CMS_0_006_000	3.1.6 Material	m_mode(calculated Data) : 1 bean(calculated Data.material) : 50
TEAM3_CMS_0_006_001	3.1.6 Material	m_mode(calculated Data) : 2 powder(calculated Data.material) : True
TEAM3_CMS_0_006_002	3.1.6 Material	m_mode(calculated Data) : 2 powder(calculated Data.material) : False
TEAM3_CMS_0_006_003	3.1.6 Material	m_mode(calculated Data) : 3 water(calculated Data.material) : 500
TEAM3_CMS_0_007_000	3.1.7 Clean	water(calculated Data.material) : 200

		material.water(current Data) : 500 Test : 0
TEAM3_CMS_0_008_000	3.1.8 Reservation	hour(calculated Data.reservation.time) : 현재 시 minute(calculated Data.reservation.time) : 현재 분 second(calculated Data.reservation.time) : 현재 초+5 r_mode(calculated Data.reservation) : 1 Test : 0
TEAM3_CMS_0_008_001	3.1.8 Reservation	hour(calculated Data.reservation.time) : 현재 시 minute(calculated Data.reservation.time) : 현재 분 second(calculated Data.reservation.time) : 현재 초+5 r_mode(calculated Data.reservation) : 2 Test : 0
TEAM3_CMS_0_009_000	3.1.9 Cancel	hour(calculated Data.reservation.time) : 12 minute(calculated Data.reservation.time) : 34 second(calculated Data.reservation.time) : 56 r_mode(calculated Data.reservation) : 1
TEAM3_CMS_0_010_000	3.1.10 Remove_	disposal(current Data) : True
TEAM3_CMS_0_011_000	3.1.11 Terminate	wait(calculated Data) : true mode(calculated Data) : 9

TEAM3_CMS_0_012_000	3.1.12	Beep Controller	b_mode(current Data) : 1 wait(current Data) : True
TEAM3_CMS_0_012_001	3.1.12	Beep Controller	b_mode(current Data) : 2 wait(current Data) : True
TEAM3_CMS_0_012_002	3.1.12	Beep Controller	b_mode(current Data) : 3 wait(current Data) : True
TEAM3_CMS_0_012_003	3.1.12	Beep Controller	b_mode(current Data) : 3 wait(current Data) : False
TEAM3_CMS_0_012_004	3.1.12	Beep Controller	b_mode(current Data) : 4 wait(current Data) : True
TEAM3_CMS_0_013_000	3.1.13	Insufficient Been	Size : 500 Length : 500
TEAM3_CMS_0_014_000	3.1.14	Insufficient Water	Size : 500 Length : 1000
TEAM3_CMS_0_015_000	3.1.15	Disposal Exist	Size : 500 Length : 500

2.2 Test items

< Table2 Test Design Identification >

Identifier	Input Specification	Output Specification
TEAM3_CMS_0_000_000	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : True material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10	mode(calculated Data) : 1 wait(calculated Data) : True b_mode(calculated Data) : 3
TEAM3_CMS_0_000_001	select(Overall Data) : 1 convertedExtractData(Overall	wait(calculated Data) : True material.water(calculated Data)

	Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10	: -50 material.powder(calculated Data) : TRUE material.bean(calculated Data) : 0
TEAM3_CMS_0_000_002	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10	material.water(calculated Data) : 50 material.powder(calculated Data) : True material.bean(calculated Data) : 0 disposal(calculated Data) : True wait(calculated Data) : False mode(calculated Data) : 1
TEAM3_CMS_0_000_003	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) :	material.water(calculated Data) : 50 material.powder(calculated Data) : FLASE material.bean(calculated Data) : 0 disposal(calculated Data) : True wait(calculated Data) : False mode(calculated Data) : 1

	10	
TEAM3_CMS_0_000_004	select(Overall Data) : 1 convertedExtractData(Overall Data) : True wait(current Data) : True disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 5	material.water(calculated Data) : 50 material.powder(calculated Data) : FLASE material.bean(calculated Data) : -5 b_mode(calculated Data) : 1 wait(calculated Data) : True mode(calculated Data) : 1
TEAM3_CMS_0_000_005	select(Overall Data) : 2 wait(current Data) : True converted Concentration Data (Overall Data) : 200	wait(calculated Data) : False concentration(calculated Data) : 200 mode(calculated Data) : 2
TEAM3_CMS_0_000_006	select(Overall Data) : 3 wait(current Data) : True converted Temperature Data (Overall Data) : True	wait(calculated Data) : False temperature(calculated Data) : True mode(calculated Data) : 3
TEAM3_CMS_0_000_007	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 1 convertedMaterialData.bean (Overall Data) : 50 material.bean (current Data) : 40	wait(calculated Data) : False material.bean(calculated Data) : 90 mode(calculated Data) : 4
TEAM3_CMS_0_000_008	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode	wait(calculated Data) : True

	(Overall Data) : 1 convertedMaterialData.bean (Overall Data) : 50 material.bean (current Data) : 60	
TEAM3_CMS_0_000_009	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 2 material.powder (current Data) : False	wait(calculated Data) : False material.powder(calculated Data) : True mode(calculated Data) : 4
TEAM3_CMS_0_000_010	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 2 material.powder (current Data) : True	wait(calculated Data) : True mode(calculated Data) : 4
TEAM3_CMS_0_000_011	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 3 convertedMaterialData.water (Overall Data) : 500 material.water (current Data) : 400	wait(calculated Data) : False material.bean(calculated Data) : 900 mode(calculated Data) : 4
TEAM3_CMS_0_000_012	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 3 convertedMaterialData.water (Overall Data) : 500 material.water (current Data) : 600	wait(calculated Data) : True mode(calculated Data) : 4
TEAM3_CMS_0_000_013	select(Overall Data) : 5 wait(current Data) : True	wait (calculated Data) : False material.water(calculated Data)

	<p>convertedCleanData(Overall Data) : True material.water (current Data) : 600</p>	<p>: 100 mode(calculated Data) : 5</p>
TEAM3_CMS_0_000_014	<p>select(Overall Data) : 5 wait(current Data) : True convertedCleanData(Overall Data) : True material.water (current Data) : 400</p>	<p>wait (calculated Data) : True mode(calculated Data) : 5</p>
TEAM3_CMS_0_000_015	<p>select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 disposal(current Data) : True material.water(current Data) : 150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10</p>	<p>wait (calculated Data) : True mode(calculated Data) : 6</p>
TEAM3_CMS_0_000_016	<p>select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 1 disposal(current Data) : False material.water(current Data) :</p>	<p>wait (calculated Data) : True mode(calculated Data) : 6</p>

	<p>150 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10</p>	
TEAM3_CMS_0_000_017	<p>select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extr act (Overall Data) : True convertedReservationData.r_m ode (Overall Data) : 1 convertedReservationData.tim e.hour (Overall Data) : 10 convertedReservationData.tim e.minute (Overall Data) : 10 convertedReservationData.tim e.second (Overall Data) : 10 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : True material.bean(current Data) : 10</p>	<p>wait(calculated Data): False disposal(calculated Data) : True material.bean (calculated Data) : 10 material.water (calculated Data) : 50 material.powder (calculated Data) : False reservation.r_mode (calculated Data) : 1 reservation.extract (calculated Data) : True reservation.time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 mode(calculated Data) : 6</p>
TEAM3_CMS_0_000_018	<p>select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extr act</p>	<p>wait(calculated Data): False disposal(calculated Data) : True material.bean (calculated Data) : 0</p>

	<p>(Overall Data) : True convertedReservationData.r_mode</p> <p>(Overall Data) : 1 convertedReservationData.time.hour</p> <p>(Overall Data) : 10 convertedReservationData.time.minute</p> <p>(Overall Data) : 10 convertedReservationData.time.second</p> <p>(Overall Data) : 10 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) : 10</p>	<p>material.water (calculated Data) : 50 material.powder (calculated Data) : False reservation.r_mode (calculated Data) : 1 reservation.extract (calculated Data) : True reservation.time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 mode(calculated Data) : 6</p>
TEAM3_CMS_0_000_019	<p>select(Overall Data) : 6 wait(current Data) : True convertedReservationData.extract</p> <p>(Overall Data) : True convertedReservationData.r_mode</p> <p>(Overall Data) : 1 disposal(current Data) : False material.water(current Data) : 250 concentration(current Data) : 200 material.powder(current Data) : False material.bean(current Data) :</p>	<p>wait (calculated Data) : True mode(calculated Data) : 6</p>

	5	
TEAM3_CMS_0_000_020	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.clean (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 2 convertedReservationData.time.hour (Overall Data) : 10 convertedReservationData.time.minute (Overall Data) : 10 convertedReservationData.time.second (Overall Data) : 10 material.water(current Data) : 600	wait(calculated Data) : False material.water(calculated Data) : 100 reservation.r_mode (calculated Data) : 2 reservation.clean (calculated Data) : True reservation.time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 reservation.r_time.hour (calculated Data) : 10 mode(calculated Data) : 6
TEAM3_CMS_0_000_021	select(Overall Data) : 6 wait(current Data) : True convertedReservationData.clean (Overall Data) : True convertedReservationData.r_mode (Overall Data) : 2 convertedReservationData.time.hour (Overall Data) : 10 convertedReservationData.time.minute (Overall Data) : 10 convertedReservationData.time.second (Overall Data) : 10 material.water(current Data) :	wait(calculated Data) : True reservation.r_mode (calculated Data) : 2 reservation.clean (calculated Data) : False reservation.time.hour (calculated Data) : 0 reservation.r_time.hour (calculated Data) : 0 reservation.r_time.hour (calculated Data) : 0 mode(calculated Data) : 6

	400	
TEAM3_CMS_0_000_022	select(Overall Data) : 7 wait(current Data) : True convertedCancelData (overall Data) : True	wait(calculated Data) : False mode(calculated Data) : 7
TEAM3_CMS_0_000_023	select(Overall Data) : 8 wait(current Data) : True convertedRemoveData(Overall Data) : True disposal(current Data) : True	wait(calculated Data) : False disposal(calculated Data) : False mode(calculated Data) : 7
TEAM3_CMS_0_000_024	select(Overall Data) : 8 wait(current Data) : True convertedRemoveData(Overall Data) : True disposal(current Data) : False	wait(calculated Data) : True disposal(calculated Data) : False mode(calculated Data) : 8
TEAM3_CMS_0_000_025	select(Overall Data) : 9 wait(current Data) : True convertedTerminateData(Over all Data) : True	wait(calculated Data) : False mode(calculated Data) : 9
TEAM3_CMS_0_001_000	mode(calculated Data) : 0 wait(current Data) : True index(Test) : 11	index(Test) : 0 = Call Wait
TEAM3_CMS_0_001_001	mode(calculated Data) : 1 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 1 = Call extract
TEAM3_CMS_0_001_002	mode(calculated Data) : 2 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 2 = Call concentration
TEAM3_CMS_0_001_003	mode(calculated Data) : 3 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 3 = Call temperature
TEAM3_CMS_0_001_004	mode(calculated Data) : 4	index(Test) : 4

	wait(current Data) : True wait(calculated Data) : False index(Test) : 11	= Call material
TEAM3_CMS_0_001_005	mode(calculated Data) : 5 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 5 = Call clean
TEAM3_CMS_0_001_006	mode(calculated Data) : 6 wait(current Data) : True wait(calculated Data) : False reservation.r_mode(calculated Data) : 1 reservation.extract(calculated Data) : True index(Test) : 11	index(Test) : 6 = Call reservation
TEAM3_CMS_0_001_007	mode(calculated Data) : 6 wait(current Data) : True wait(calculated Data) : False reservation.r_mode(calculated Data) : 2 reservation.clean(calculated Data) : True index(Test) : 11	index(Test) : 6 = Call reservation
TEAM3_CMS_0_001_008	mode(calculated Data) : 7 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 7 = Call Cancel
TEAM3_CMS_0_001_009	mode(calculated Data) : 8 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 8 = Call Remove
TEAM3_CMS_0_001_010	mode(calculated Data) : 9 wait(current Data) : True wait(calculated Data) : False	index(Test) : 9 = Call Terminate

	index(Test) : 11	
TEAM3_CMS_0_001_011	mode(calculated Data) : 10 wait(current Data) : True wait(calculated Data) : Flase index(Test) : 11	index(Test) : -1 =어떠한 함수도 Call하지 않음
TEAM3_CMS_0_001_012	mode(calculated Data) : 1 wait(current Data) : False wait(calculated Data) : Flase index(Test) : 11	index(Test) : -1 =어떠한 함수도 Call하지 않음
TEAM3_CMS_0_001_013	mode(calculated Data) : 9 wait(current Data) : True wait(calculated Data) : True index(Test) : 11	index(Test) : -1 =어떠한 함수도 Call하지 않음
TEAM3_CMS_0_001_014	mode(calculated Data) : 9 wait(current Data) : False wait(calculated Data) : True index(Test) : 11	index(Test) : -1 =어떠한 함수도 Call하지 않음
TEAM3_CMS_0_002_000	wait(current Data) : True mode(current Data) : 0	condition(display Data) : Waiting wait(display Data) : True mode(display Data) : 0
TEAM3_CMS_0_003_000	temperature(current Data) : False water(current Data.material) : 100 bean(current Data.material) : 90 powder (current Data.material) : True disposal(current Data) : False water(calculated Data) : 50 bean(calculated Data.material) : 80 powder(calculated Data.material) : True disposal(calculated Data) :	test : 20 water(current Data.material) : 50 bean(current Data.material) : 80 powder(current Data.material) : True disposal(current Data) : True test : 20

	True test : 0	
TEAM3_CMS_0_003_001	temperature(current Data) : False powder(calculated Data.material) : False test : 0	Test : 15
TEAM3_CMS_0_003_002	temperature(current Data) : True powder(calculated Data.material) : False test : 0	Test : 25
TEAM3_CMS_0_003_003	temperature(current Data) : True powder(calculated Data.material) : True test : 0	Test : 15
TEAM3_CMS_0_004_000	concentration(Calculated Data) : 100	concentration(display Data) : 100
TEAM3_CMS_0_005_000	temperature(calculated Data) : True	temperature(display Data) : Hot
TEAM3_CMS_0_005_001	temperature(calculated Data) : Flase	temperature(display Data) : Ice
TEAM3_CMS_0_006_000	m_mode(calculated Data) : 1 bean(calculated Data.material) : 50	bean(display Data) : 50 bean(current Data.material) : 50
TEAM3_CMS_0_006_001	m_mode(calculated Data) : 2 powder(calculated Data.material) : True	powder(display Data) : O powder(current Data.material) : True
TEAM3_CMS_0_006_002	m_mode(calculated Data) : 2 powder(calculated Data.material) : False	powder(display Data) : X powder(current Data.material) : False
TEAM3_CMS_0_006_003	m_mode(calculated Data) : 3	water(display Data) : 500

	water(calculated Data.material) : 500	Water(current Data.material) : 500
TEAM3_CMS_0_007_000	water(calculated Data.material) : 200 material.water(current Data) : 500 Test : 0	material.water(current Data) : 200 Test : 10
TEAM3_CMS_0_008_000	hour(calculated Data.reservation.time) : 현재 시 minute(calculated Data.reservation.time) : 현재 분 second(calculated Data.reservation.time) : 현재 초+5 r_mode(calculated Data.reservation) : 1 Test : 0	Test : 15 r_mode(calculated Data.reservation) : 0
TEAM3_CMS_0_008_001	hour(calculated Data.reservation.time) : 현재 시 minute(calculated Data.reservation.time) : 현재 분 second(calculated Data.reservation.time) : 현재 초+5 r_mode(calculated Data.reservation) : 2 Test : 0	Test : 25 r_mode(calculated Data.reservation) : 0
TEAM3_CMS_0_009_000	hour(calculated Data.reservation.time) : 12 minute(calculated Data.reservation.time)	hour(calculated Data.reservation.time) : -1 minute(calculated Data.reservation.time)

	: 34 second(calculated Data.reservation.time) : 56 r_mode(calculated Data.reservation) : 1	: -1 second(calculated Data.reservation.time) : -1 r_mode(calculated Data.reservation) : 0
TEAM3_CMS_0_010_000	disposal(current Data) : True	check_clean(display Data) : X
TEAM3_CMS_0_011_000	wait(calculated Data) : true mode(calculated Data) : 9	wait(current Data) : true mode(current Data) : 9
TEAM3_CMS_0_012_000	b_mode(current Data) : 1 wait(current Data) : True	Call Insufficient Bean
TEAM3_CMS_0_012_001	b_mode(current Data) : 2 wait(current Data) : True	Call Insufficient Water
TEAM3_CMS_0_012_002	b_mode(current Data) : 3 wait(current Data) : True	Call Disposal Powder
TEAM3_CMS_0_012_003	b_mode(current Data) : 3 wait(current Data) : False	Beep Controller Error
TEAM3_CMS_0_012_004	b_mode(current Data) : 4 wait(current Data) : True	Beep Controller Error
TEAM3_CMS_0_013_000	Size : 500 Length : 500	Beep 발생
TEAM3_CMS_0_014_000	Size : 500 Length : 1000	Beep 발생
TEAM3_CMS_0_015_000	Size : 500 Length : 500	Beep 발생

2.3 Input specifications

< Table2 Test Design Identification > 참조

2.4 Output specifications

< Table2 Test Design Identification > 참조

3 Environmental needs

Coffee Machine System의 Unit Test를 위한 환경적 요구사항은 다음과 같다.

(1) Hardware & Platform

GCC compiler/linker

(2) CTIP(Continuous Testing & Integrated Platform) Environment

Cygwin

4 Unit test summary report

4.1 Test summary report identifier

Test case Identifier	Result
TEAM3_CMS_0_000_000	passed
TEAM3_CMS_0_000_001	passed
TEAM3_CMS_0_000_002	passed
TEAM3_CMS_0_000_003	passed
TEAM3_CMS_0_000_004	passed
TEAM3_CMS_0_000_005	passed
TEAM3_CMS_0_000_006	passed
TEAM3_CMS_0_000_007	passed
TEAM3_CMS_0_000_008	passed
TEAM3_CMS_0_000_009	passed
TEAM3_CMS_0_000_010	passed
TEAM3_CMS_0_000_011	passed
TEAM3_CMS_0_000_012	passed
TEAM3_CMS_0_000_013	passed
TEAM3_CMS_0_000_014	passed
TEAM3_CMS_0_000_015	passed
TEAM3_CMS_0_000_016	passed
TEAM3_CMS_0_000_017	passed
TEAM3_CMS_0_000_018	passed
TEAM3_CMS_0_000_019	passed
TEAM3_CMS_0_000_020	passed
TEAM3_CMS_0_000_021	passed
TEAM3_CMS_0_000_022	passed
TEAM3_CMS_0_000_023	passed
TEAM3_CMS_0_000_024	passed
TEAM3_CMS_0_000_025	passed
TEAM3_CMS_0_001_000	passed

TEAM3_CMS_0_001_001	passed
TEAM3_CMS_0_001_002	passed
TEAM3_CMS_0_001_003	passed
TEAM3_CMS_0_001_004	passed
TEAM3_CMS_0_001_005	passed
TEAM3_CMS_0_001_006	passed
TEAM3_CMS_0_001_007	passed
TEAM3_CMS_0_001_008	passed
TEAM3_CMS_0_001_009	passed
TEAM3_CMS_0_001_010	passed
TEAM3_CMS_0_001_011	passed
TEAM3_CMS_0_001_012	passed
TEAM3_CMS_0_001_013	passed
TEAM3_CMS_0_001_014	passed
TEAM3_CMS_0_002_000	passed
TEAM3_CMS_0_003_000	passed
TEAM3_CMS_0_003_001	passed
TEAM3_CMS_0_003_002	passed
TEAM3_CMS_0_003_003	passed
TEAM3_CMS_0_004_000	passed
TEAM3_CMS_0_005_000	passed
TEAM3_CMS_0_005_001	passed
TEAM3_CMS_0_006_000	passed
TEAM3_CMS_0_006_001	passed
TEAM3_CMS_0_006_002	passed
TEAM3_CMS_0_006_003	passed
TEAM3_CMS_0_007_000	passed
TEAM3_CMS_0_008_000	passed
TEAM3_CMS_0_008_001	passed
TEAM3_CMS_0_009_000	passed
TEAM3_CMS_0_010_000	passed
TEAM3_CMS_0_011_000	passed
TEAM3_CMS_0_012_000	passed
TEAM3_CMS_0_012_001	passed
TEAM3_CMS_0_012_002	passed
TEAM3_CMS_0_012_003	passed
TEAM3_CMS_0_012_004	passed
TEAM3_CMS_0_013_000	passed

TEAM3_CMS_0_014_000	passed
TEAM3_CMS_0_015_000	passed

4.2 Evaluation

Total Test case : 67

Passed : 67

Failed : 0