

# Unit Test for Coffee Machine

Team Presentation #ver 3.0

Team [T3]

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# 01 References

[2016SE\_B][T3]SRA ver 5.0

Process Specification

DFD

State Transition Diagram

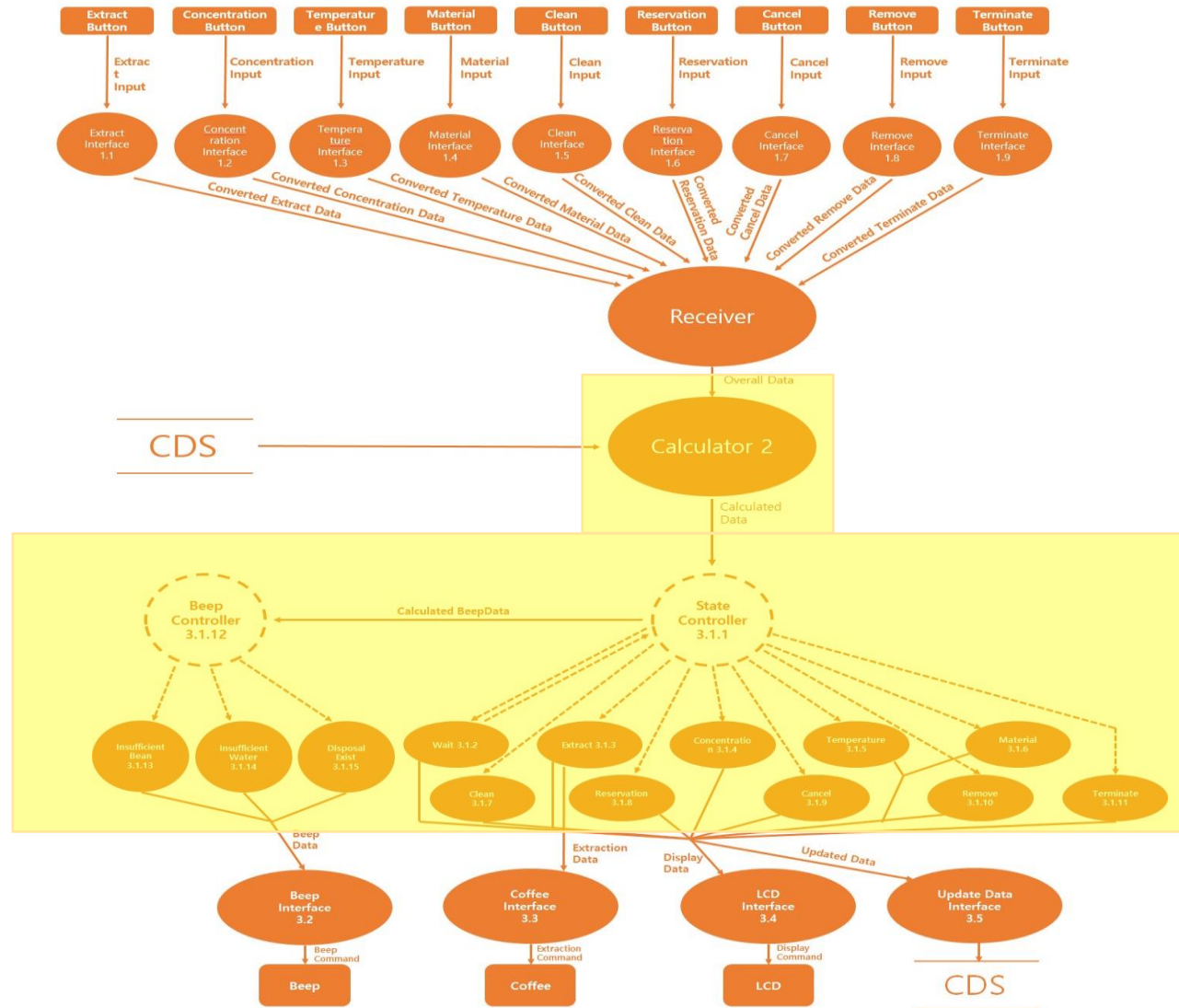
[2016SE\_B][T3]SDA ver 4.0

Process Specification

Structure Chart

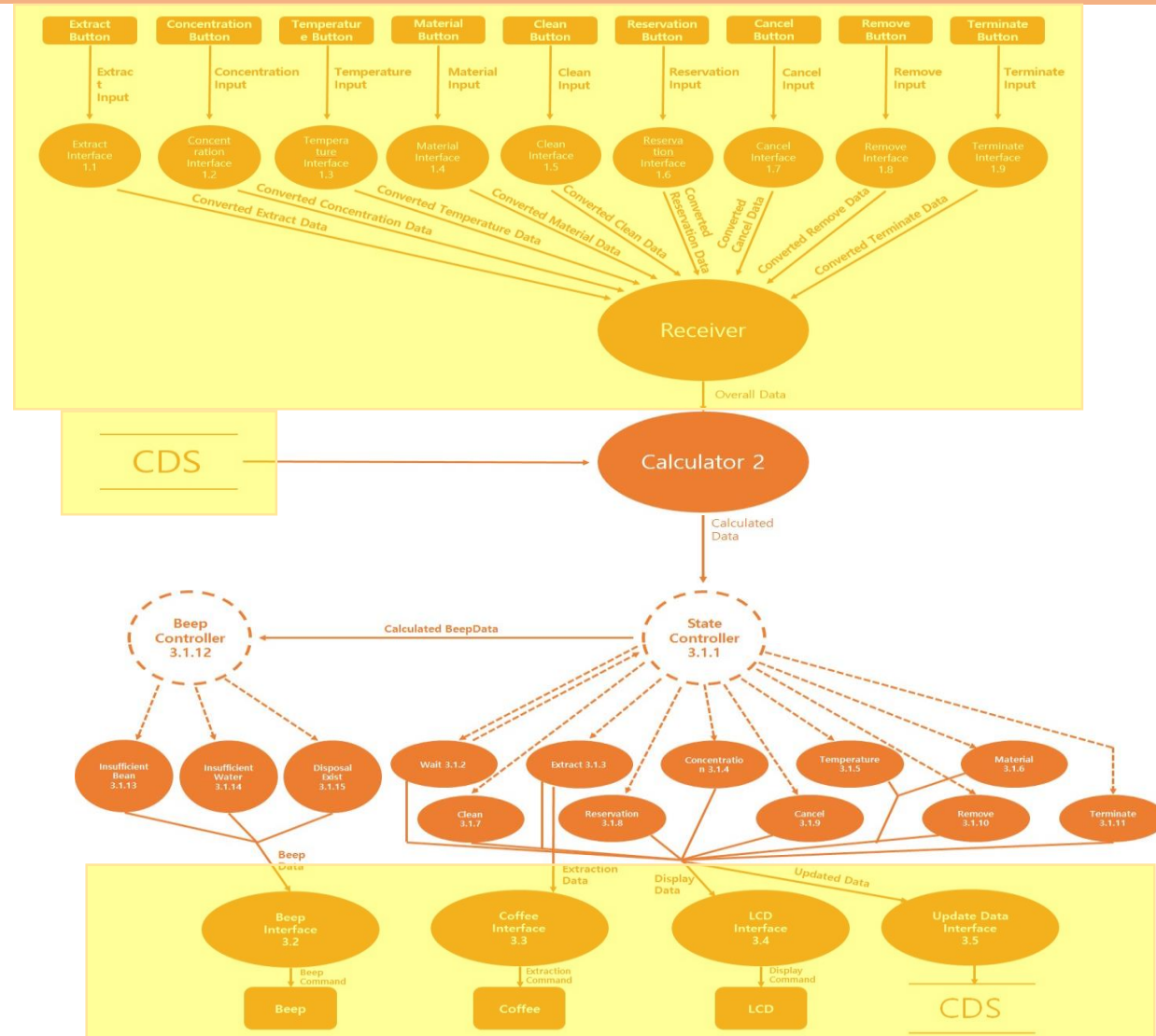
# 02 Features to be tested

ID	Name
2	Calculator
3.1.1	State Controller
3.1.2	Wait
3.1.3	Extract
3.1.4	Concentration
3.1.5	Temperature
3.1.6	Material
3.1.7	Clean
3.1.8	Reservation
3.1.9	Cancel
3.1.10	Remove
3.1.11	Terminate
3.1.12	Beep Controller
3.1.13	Insufficient Been
3.1.14	Insufficient Water
3.1.15	Disposal Exist



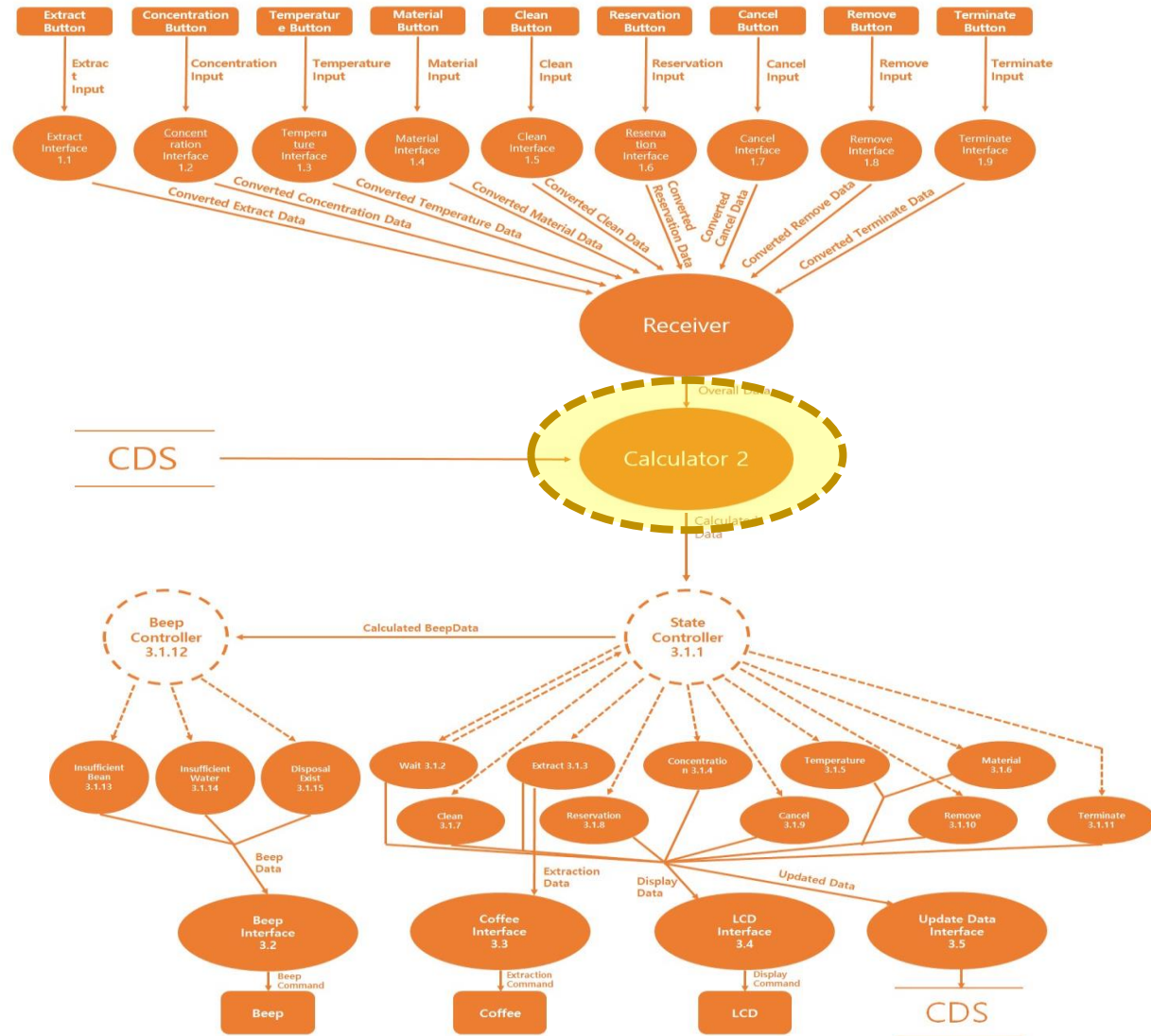
# 03 Features not to be tested

ID	Name
1.1	Extract Interface
1.2	Concentration Interface
1.3	Temperature Interface
1.4	Material Interface
1.5	Clean Interface
1.6	Reservation Interface
1.7	Cancel Interface
1.8	Remove Interface
1.9	Terminate Interface
1.10	Receiver
3.2	Beep Interface
3.3	Coffee Interface
3.4	LCD Interface
3.5	Updated Interface



# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)
TEAM3_CMS_0_000_000	2 Calculator
TEAM3_CMS_0_000_001	2 Calculator
TEAM3_CMS_0_000_002	2 Calculator
TEAM3_CMS_0_000_003	2 Calculator
TEAM3_CMS_0_000_004	2 Calculator
TEAM3_CMS_0_000_005	2 Calculator
TEAM3_CMS_0_000_006	2 Calculator
TEAM3_CMS_0_000_007	2 Calculator
TEAM3_CMS_0_000_008	2 Calculator
TEAM3_CMS_0_000_009	2 Calculator
TEAM3_CMS_0_000_010	2 Calculator
TEAM3_CMS_0_000_011	2 Calculator
TEAM3_CMS_0_000_012	2 Calculator
TEAM3_CMS_0_000_013	2 Calculator
TEAM3_CMS_0_000_014	2 Calculator
TEAM3_CMS_0_000_015	2 Calculator
TEAM3_CMS_0_000_016	2 Calculator
TEAM3_CMS_0_000_017	2 Calculator
TEAM3_CMS_0_000_018	2 Calculator
TEAM3_CMS_0_000_019	2 Calculator
TEAM3_CMS_0_000_020	2 Calculator
TEAM3_CMS_0_000_021	2 Calculator
TEAM3_CMS_0_000_022	2 Calculator
TEAM3_CMS_0_000_023	2 Calculator
TEAM3_CMS_0_000_024	2 Calculator
TEAM3_CMS_0_000_025	2 Calculator



# 04 Test Identification - Calculator

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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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



# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
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

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
TEAM3_CMS_0_000_020	2 Calculator	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
TEAM3_CMS_0_000_021	2 Calculator	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) : 400

# 04 Test Identification - Calculator

Identifier	Feature(Process DFD)	Valid / Invalid value
TEAM3_CMS_0_000_022	2 Calculator	select(Overall Data) : 7 wait(current Data) : True convertedCancelData (overall Data) : True
TEAM3_CMS_0_000_023	2 Calculator	select(Overall Data) : 8 wait(current Data) : True convertedRemoveData(Overall Data) : True disposal(current Data) : True
TEAM3_CMS_0_000_024	2 Calculator	select(Overall Data) : 8 wait(current Data) : True convertedRemoveData(Overall Data) : True disposal(current Data) : False
TEAM3_CMS_0_000_025	2 Calculator	select(Overall Data) : 9 wait(current Data) : True convertedTerminateData(Overall Data) : True

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_000</b>	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
<b>TEAM3_CMS_0_000_001</b>	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	wait(calculated Data) : True material.water(calculated Data) : -50 material.powder(calculated Data) : TRUE material.bean(calculated Data) : 0
<b>TEAM3_CMS_0_000_002</b>	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



# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_003</b>	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	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
<b>TEAM3_CMS_0_000_004</b>	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
<b>TEAM3_CMS_0_000_005</b>	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

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_006</b>	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
<b>TEAM3_CMS_0_000_007</b>	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
<b>TEAM3_CMS_0_000_008</b>	select(Overall Data) : 4 wait(current Data) : True convertedMaterialData.m_mode (Overall Data) : 1 convertedMaterialData.bean (Overall Data) : 50 material.bean (current Data) : 60	wait(calculated Data) : True
<b>TEAM3_CMS_0_000_009</b>	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
<b>TEAM3_CMS_0_000_010</b>	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

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_011</b>	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
<b>TEAM3_CMS_0_000_012</b>	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
<b>TEAM3_CMS_0_000_013</b>	select(Overall Data) : 5 wait(current Data) : True convertedCleanData(Overall Data) : True material.water (current Data) : 600	wait (calculated Data) : False material.water(calculated Data) : 100 mode(calculated Data) : 5
<b>TEAM3_CMS_0_000_014</b>	select(Overall Data) : 5 wait(current Data) : True convertedCleanData(Overall Data) : True material.water (current Data) : 400	wait (calculated Data) : True mode(calculated Data) : 5

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_015</b>	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	wait (calculated Data) : True mode(calculated Data) : 6
<b>TEAM3_CMS_0_000_016</b>	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	wait (calculated Data) : True mode(calculated Data) : 6

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
TEAM3_CMS_0_000_017	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	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

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
TEAM3_CMS_0_000_018	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	wait(calculated Data): False disposal(calculated Data) : True material.bean (calculated Data) : 0 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

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
TEAM3_CMS_0_000_019	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	wait (calculated Data) : True mode(calculated Data) : 6
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

# 05 Test Case Specification - Calculator

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_000_021</b>	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) : 400	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
<b>TEAM3_CMS_0_000_022</b>	select(Overall Data) : 7 wait(current Data) : True convertedCancelData (overall Data) : True	wait(calculated Data) : False mode(calculated Data) : 7
<b>TEAM3_CMS_0_000_023</b>	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
<b>TEAM3_CMS_0_000_024</b>	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
<b>TEAM3_CMS_0_000_025</b>	select(Overall Data) : 9 wait(current Data) : True convertedTerminateData(Overall Data) : True	wait(calculated Data) : False mode(calculated Data) : 9



# 06 Test Code for Unit Test

Identifier	Input Specification	Output Specification
<b>TEAM3_CMS_0_001_001</b>	mode(calculated Data) : 1 wait(current Data) : True wait(calculated Data) : False index(Test) : 11	index(Test) : 1 = Call extract
<b>TEAM3_CMS_0_003_000</b>	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	test : 20 water(current Data.material) : 50 bean(current Data.material) : 80 powder(current Data.material) : True disposal(current Data) : True test : 20

# 06 Test Code for Unit Test

Identifier	Input Specification	Output Specification
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_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) : True test : 0	test : 20 water(current Data.material) : 50 bean(current Data.material) : 80 powder(current Data.material) : True disposal(current Data) : True test : 20

This Value is only Used to Testing

# 06 Test Code for Unit Test

```
int stateController(data_storage *calculatedData, data_storage *currentData) {
    int index;

    if ((calculatedData->mode == -1 || calculatedData->mode == 0) && (currentData->wait)) {
        currentData->mode = calculatedData->mode;
        calculatedData->wait = currentData->wait;
        //wait(calculatedData, currentData);
        index = 0;
    }

    else if (!(calculatedData->wait) && calculatedData->mode == 1 && (currentData->wait)) {
        currentData->mode = calculatedData->mode;
        currentData->wait = calculatedData->wait;
        //extract(calculatedData, currentData);
        index = 1;
    }
}
```

# 06 Test Code for Unit Test

```
int extract(data_storage *calculatedData, data_storage *currentData) {
    BOOLEAN temp_disposal = calculatedData->disposal;
    currentData->disposal = temp_disposal;
    currentData->material.water = calculatedData->material.water;
    currentData->material.powder = calculatedData->material.powder;
    currentData->material.bean = calculatedData->material.bean;
    int test = 0;

    display_data *displayData = NULL;
    displayData = init_display(calculatedData, currentData);

    time_t timer;
    struct tm *t;

    while (1)
    {
        timer = time(NULL);
        t = localtime(&timer);
        if (displayData->time == -1)
            displayData->time = t->tm_sec + t->tm_min * 60;
        if (!strcmp(displayData->powder, "X"))
        {
            if (displayData->time + 4 < t->tm_sec + t->tm_min * 60)
            {
                if (!strcmp(displayData->temperature, "Hot")) //뜨거울 때
                {
                    strcpy(displayData->condition, "Heating");
                    Sleep(1000);
                    if (displayData->time + 24 < t->tm_sec + t->tm_min * 60)
                    {
                        strcpy(displayData->condition, "Waiting");
                        break;
                    }
                }
                else if (displayData->time + 14 < t->tm_sec + t->tm_min * 60)
                {
                    strcpy(displayData->condition, "Extracting");
                    test++;
                }
            }
        }
    }
}
```