USE CASES COMBINED WITH BOOCH/OMT/UML:

PROCESS AND PRODUCTS

Putnam P. Texel
Charles B. Williams

Prentice Hall PTR
Upper Saddle River, NJ 07458
http://www.prenhall.com

1997

Use Case xx: Title

Overview:

< Text that provides a high-level description of the Use Case.>

Preconditions:

<List numerically the assumptions required before this Use Case can be executed.>

Scenario:

Action	Software Reaction
1. <Specify an Action>	1. <Describe the software reaction>
2. <Specify an Action>	2. <Describe the software reaction>

Scenario Notes:

<Indicate concurrency of Actions, any additional information, such as optional steps and branching and iteration steps. When indicating same, refer to specific sequence number.>

Post Conditions:

<List sequentially the conditions expected at the completion of the Scenario.>

Required GUI:

<List the names of the GUIs utilized in this Scenario.>

Exceptions:

<List sequentially any failure conditions that can affect the Scenario, and how the system should respond.>

Use Cases Utilized:

<List other Use Cases used.>

Timing Constraints:

<Specify any timing constraints for the Use Case or portion of the Use Case.>

Figure 2-4. Sample Scenario Format

Use Case 16: Operator_Updates_Nominal_Values_In_DB

Overview:

This Use Case enables the Operator to change the nominal values of all three environmental conditions in the database. These updated values are the nominal values against which the values detected by the sensors are compared to reflect percent deviation.

Preconditions:

1. There are no alarms currently active.
2. SEM_Desktop_View is displayed.
3. The database is accessible.

Scenario:

Action	Software Reaction
1. Operator clicks on the Update All button on the SEM_Desktop_View.	1. Update_All_View pop-up appears.
2. Disable the alarm.	2. Alarm disabled.
3. Enter Air Pressure value.	3. Air Pressure field is updated.
4. Enter Oxygen value.	4. Oxygen field is updated.
5. Enter Temperature value.	5. Temperature field is updated.
6. Operator clicks on the OK button.	6. The Update_All_View pop-up is destroyed, the DB is updated, and the Operator is returned to the SEM_Desktop_View.
7. Operator clicks on the Cancel button.	7. The Update_All_View is destroyed and monitoring continues. The database is not updated.
8. Enable alarm.	8. Alarm is enabled.

Scenario Notes:

Items 3, 4, and 5 may be done in any order. Additionally the Operator does not have to update all three values. This Use Case *permits* the modification of all three values, *but* the Operator may choose to update one, two, or all three. Steps 6 and 7 are mutually exclusive. Step 8 happens regardless of whether 6 or 7 was selected.

Post Conditions:

1. The nominal Air Pressure value is updated in the DB (if OK button was selected).
2. The nominal Oxygen value is updated in the DB(if OK button was selected).
3. The nominal Temperature value is updated in the DB(if OK button was selected).
4. The Operator is returned to the Desktop.
5. The alarm is enabled.

Exceptions:

1. The DB cannot be accessed.

Use Cases Utilized:

None

Required GUI:

1. SEM_Desktop_View
2. Update_All_View pop-up

Timing Constraints:

None

Figure 2-5. Example Scenario: Use Case 16