# Title: Detailed Use Cases (Iterations 1) for System C.H.A.T Sub-Title: “Detailed Use Cases for First Iteration PA1435 Object Oriented Design” Date: 2018-04-08

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# System Description

The system is a created to get an overview of different warehouses. A user could for example be a worker at the warehouse that needs to easily get an overview of the current state (were trucks are, current inventory etc.) The main goal is for workers to easily locate where certain goods are stored, and to direct a truck to either fetch or deliver it to a desired location.

Managers of the warehouse, e.g. administrators, can use the system to add new warehouses. Users and administrators (administrators are users with extra privileges) also have the ability to communicate with each other by sending text messages.

## Detailed Use Cases

**Name:** Display Warehouse

**Actors:** User, Administrator

**Preconditions:** Existing ware house

**Description:** A user/admin can display a map of the currently selected warehouse. The map shows the warehouse’s isles, goods and trucks.

**Main course of events:**

|  |  |
| --- | --- |
| Actor | System |
| 1. User/Admin selects the ware house they wish to watch |  |
|  | 1. System loads map and the information of the ware house. |

**Alternative flow of events:**

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**Name:** Add Goods

**Actors:** User, Administrator

**Preconditions:** List of goods

**Description:** A user can add goods to the warehouse. This is done by opening a window and selecting goods to be added from a list.

**Main Course of events:**

|  |  |
| --- | --- |
| Actor | System |
| 1.User/admin selects what item they wish to add |  |
|  | 2.System displays a window with a quantity slide to let the user decide the amount of goods. |
| 3.User/admin decides the quantity he/she desires to add to inventory. |  |
|  | 4.System adds the goods to inventory. |

**Alternative flow of events:**

1.The item cannot be found in the list of items.

4.The inventory is full. Contact the developers if they wish to add none existing item to the list

**Name:** Move Goods

**Actors:** User, Administrator

**Description:** A user can select goods and move it around using cursor keys.

**Preconditions:** There are goods in the warehouse.

**Main Course of Events:**

|  |  |
| --- | --- |
| Actor | System |
| 1. A user clicks on goods using the cursor, thereby selecting it. |  |
|  | 2. The system displays information about the goods, and a button to edit the goods. |
| 3. The user clicks on the edit goods button. |  |
|  | 4. The system verifies that the goods aren’t locked. |
|  | 5. Initiate use case Lock truck or goods. |
| 6. The user moves the goods by click-holding the goods and moving the cursor to a valid location for the goods and then releasing the cursor key. |  |
|  | 7. The system initiates an automatic version of use case Direct trucks with instructions to the truck to move the goods. |
|  | 8. The system moves the goods to the new location on the map. |

**Alternative Flow of Events:**

1. The user tries to select something that isn’t goods, …

1a. …if it’s a truck initiate use case Look at trucks cargo.

1b. …if it’s anything else on the map, it is not selectable and nothing happens.

1. The goods are locked by another user, the system displays an error message saying that the goods are locked.
2. The user tries to move the goods to a non-valid location, the system then displays an error message explaining that it isn’t a valid location.

**Name:** Edit Goods

**Actors:** User, Administrator

**Description:** A user can select goods and edit different attributes of the goods. These attributes are name, type, price and weight.

**Preconditions:** There are goods in the warehouse.

**Main Course of Events:**

|  |  |
| --- | --- |
| Actor | System |
| 1. A user clicks on goods using the cursor, thereby selecting it. |  |
|  | 2. The system displays information about the goods, and a button to edit the goods. |
| 3. The user clicks on the edit goods button. |  |
|  | 4. The system verifies that the goods aren’t locked. |
|  | 5. Initiate use case Lock truck or goods. |
| 6. The user edits the different fields of the goods like, name and type. |  |
|  | 7. The system changes the goods data, applying the changes done by the user. |

**Alternative Flow of Events:**

1. The user tries to select something that isn’t goods, …

1a. …if it’s a truck initiate use case Look at trucks cargo.

1b. …if it’s anything else on the map, it is not selectable and nothing happens.

1. The goods are locked by another user, the system displays an error message saying that the goods are locked.
2. The user doesn’t input a valid change, if the name is too long, system displays error message saying the name is too long.

**Name**: Stack small Items

**Actors**: User, Administrator

**Description**: Smaller items can be stacked in a box called collection by placing an item on another similar item. This collection acts as one item.

**Preconditions:** The warehouse contains more than one small item.

**Main Couse of Events:**

|  |  |
| --- | --- |
| Actor | System |
| 1. The user/admin presses a small item on the warehouse map |  |
|  | 1. The system displays detailed information and an edit button |
| 1. The user/admin presses the edit button |  |
|  | 1. The system initiates use case Lock truck or goods and verifies that the goods are not locked. The System displays different fields that can be changed, and a stack item button |
| 1. The user/admin presses the stack item button |  |
|  | 1. The system highlights every collection that can be used as destination |
| 1. The user/admin clicks on a collection |  |
|  | 1. The system initiates an automatic use case of Direct Trucks and gives the instruction to move the item to the new location. The system displays a message that the instruction is queued. |

**Alternative Flow of Events:**

4. The item is already locked and can therefore not be edited. The system then displays an error message “Item already in use by someone else!”.

7. The user clicks outside or not on a collection. The system then displays an error message “Not a collection!”

**Name**: Organize Boxes Hierarchically

**Actors**: User, Administrator

**Description**: Goods can be a subtype of another item. For example, Big-Boxes is the main-type and has the four sub-types: Cold-Storage, Hot-Storage, Soft-Box, Hard-Box. This means that these boxes have the same outer dimensions so that they easily can be organized and stacked together.

**Preconditions:** The are goods in the warehouse.

**Main Couse of Events:**

|  |  |
| --- | --- |
| Actor | System |
| 1. The user/admin presses an item on the warehouse map |  |
|  | 1. The system displays detailed information and an edit button |
| 1. The user/admin presses the edit button |  |
|  | 1. The system initiates use case Lock truck or goods and verifies that the goods are not locked. The System displays different fields that can be changed, including the subtype field |
| 1. The user/admin choose a subtype |  |
|  | 1. The system applies the newly edited data and displays a success message |

**Alternative Flow of Events:**

4. The item is already locked and can therefore not be edited. The system then displays an error message “Item already in use by someone else!”.