#### VIA UNIVERSITY COLLEGE ICT ENGINEERING

# Warehouse Management System

# Appendix B – Use Case Descriptions

SEP-2

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#### Add Customer

ITEM	VALUE
UseCase	Add customer
Summary	The administator wants to add a new costumer to the system.
Actor	Administrator
Precondition	The warehouse needs custumers to sell the products.
Postcondition	A new customer is added to the system.
Base Sequence	1. Enter CVR number. 2. Enter customer name. 3. Enter address. 4. Enter email. 5. Enter phone number. 6. Press "Add":
Exception Sequence	Step 1-6: same as base sequence. 7. Pop-up warning message saying that there are empty fields.
Exception Sequence 1	Step 1-6: same as base sequence. 7. Pop-up warning message saying that the phone number needs to be only numbers.
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to upate the database.

### Add Picker

ITEM	VALUE
UseCase	Add Picker
Summary	The Administrator adds a new picker to the system.
Actor	Administrator
Precondition	Someone new is hired at the warehouse as a picker.
Postcondition	Picker is registered in the system.
Base Sequence	1. Enter first name. 2. Enter last name. 3. Enter address. 4. Enter phone number. 5. Enter cpr number. 6. Enter email. 7. Press on the "Add" button.
Exception Sequence	Steps 1-7: same as base sequence. 8. Pop-up warning message saying that a picker with the same cpr number already exists.
Exception Sequence 1	Step 1-7 same as base sequence. 8. Administrator leaves at least one field empty. 9. System pops-up a message saying that all fields should be filled with valid data.
Exeption Sequence 2	
Sub UseCase	
	For this page to work, the server needs to be running.

## Add Product/Category

ITEM	VALUE
UseCase	Add Product / Category
Summary	Administrator adds a new product to the inventory and in case the category doesn't exist in the combo box, the administrator can add a new category.
Actor	Administrator
Precondition	The warehouse ordered a new product that does not already exist in the inventory and therefore the administrator needs to add it.
Postcondition	The inventory is updated with a new product and maybe a new category.
Base Sequence	1. Enter product ID. 2. Enter product name. 3. Choose category from combo box. 4. Choose supplier from combo box. 5. Press on add button.
Exception Sequence	Step 1 + 2: same as base sequence. 3. Choose "Add Category" from combo box. 4. Enter a new category in the "Add Category" text box below the combo box. 5. Same as step 4-5 from base sequence.
Exception Sequence 1	Administrator leaves at least one field empty or uses invalid data.     System pops-up a warning message saying that all fields need to be filled out with valid data.
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to upate the database.

## Add Supplier

ITEM	VALUE
UseCase	Add supplier
Summary	Warehouse is going to order products from new suppliers.
Actor	Administrator
Precondition	Warehouse needs supliers.
Postcondition	Warehouse hase a new supplier to order from.
Base Sequence	1. Enter supplier name. 2. Enter street name. 3. Enter post code. 4. Enter phone number. 5. Enter email. 6. Press "Add" button.
Exception Sequence	Step 1-6: as base sequence. 7. System pops up a warning message saying that all fields must be filled.
Exception Sequence 1	Step 1-6: as base sequence. 7. System pops up a warning message saying that the phone number and postal code needs to be only numbers.
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to upate the database.

## Check In

ITEM	VALUE
UseCase	Check in
Summary	The Picker can check in when he/she starts the shift.
Actor	Picker
Precondition	The picker must show up at the warehouse.
Postcondition	The picker checked in and was added to the list of "Pickers At Work".
Base Sequence	1. Enter picker ID. 2. Click on "Check In".
Exception Sequence	Step 1+2: same as base sequence.  3. System pops-up a warning message saying that the ID was incorrect or the field was left blank.
Exception Sequence  Exception Sequence 1	3. System pops-up a warning message saying that the ID was incorrect or the
32 38	3. System pops-up a warning message saying that the ID was incorrect or the field was left blank.  Step 1+2: same as base sequence.  3. Pop-up warning message saying that the picker is already checked in, and
Exception Sequence 1	3. System pops-up a warning message saying that the ID was incorrect or the field was left blank.  Step 1+2: same as base sequence.  3. Pop-up warning message saying that the picker is already checked in, and

#### Check Orders

ITEM	VALUE
UseCase	Check Orders
Summary	The administrator can see a list of available orders that are not currently being picked and also a list of "In Progress" orders.
Actor	Administrator
Precondition	There should be at least one order made by a customer.
Postcondition	The administrator knows about all the available or in progress orders.
Base Sequence	System shows a list with all available orders.     Administrator double clicks on one of the orders.     System shows all the details of the selected order.
Exception Sequence	Administrator selects the "In Progress" menu.     Steps 2+3: same as base sequence.     System also shows the ID of the picker for that order.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

#### Check Out

ITEM	VALUE
UseCase	Check Out
Summary	The picker is done with his/her shift so they check out of the system.
Actor	Picker
Precondition	The picker is at work and done with their shift.
Postcondition	The picker checks out and is removed from the Pickers At Work list.
Base Sequence	1. Enter picker ID. 2. Click on "Check Out".
Exception Sequence	Step 1+2: same as base sequence. 3. System pops-up a warning message saying that the ID was incorrect or the field was left blank.
Exception Sequence 1	Step 1+2: same as Exception Sequence 3. Pop-up warning message saying that the picker needs to check in rather than check out.
Exeption Sequence 2	
Sub UseCase	

## Check Products Expiry Date

ITEM	VALUE
UseCase	Check Products Expiry Date
Summary	The administrator can view all the products that are about to expire before the date entered.
Actor	Administrator
Precondition	There needs to be at least one product in the inventory.
Postcondition	The administrator gets a list with the products that are going to expire before the entered date or an empty list if no products will expire before that date.
Base Sequence	1. Chose the day, month and year. 2. Press on the "Search" button. 3. System prints out a list with information about that specific product.
Exception Sequence	Step 1+2 same as base sequence.  3. Text area is empty beause no products expire before that date.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

#### Check Product's Information

ITEM	VALUE
UseCase	Check Product's Information
Summary	The administrator wants to see information about a specific product.
Actor	Administrator
Precondition	The product needs to exist in the inventory for the administrator to be able to retrieve the information.
Postcondition	The administrator now has information about the product he/she was searching for.
Base Sequence	1. Enter a product ID. 2. Press "Search" button. 3. System prints out all the pallets with the same product ID (the information that will be printed: pallet ID, product ID, product Name, number of boxes, and the expiry date).
Exception Sequence	Step 1: same as base sequence.  2. System prints a warning message saying that the product ID does not exist in the inventory.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

## Finish/Incomplete Order

ITEM	VALUE
UseCase	Finish / Incomplete Order
Summary	The picker either successfully completes an order or marks it as incomplete.
Actor	Picker
Precondition	The picker must have started the same order that they are trying to mark as complete or incomplete.
Postcondition	The order is either sent back to the "Available Orders" list if the order is incomplete, or if the order was completed, then an invoice is created.
Base Sequence	1. Enter picker ID. 3. Sellect all the items that are picked. 4. Click on "Finish Order".
Exception Sequence	Steps 1+2: same as base sequence. 3. Select each item from the order that has been picked. 4. Click on "Incomplete".
Exception Sequence 1	Step 1+2: same as base sequence.  3. System pops-up a warning message saying that the entered ID is not the
Exeption Sequence 2	same as the picker ID that started the order.
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

#### List of Customers

ITEM	VALUE
UseCase	List of customers
Summary	The administrator wants to see the customer that he has at the warehouse.
Actor	Administrator
Precondition	A customer must exist.
Postcondition	The administrator knows about all the customers.
Base Sequence	Enter customer ID.     Press "Search" button.
Exception Sequence	Step 1-2: same as base sequence.  3. Pop-up warning message saying that the customer ID does not exist.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

#### List of Invoices

ITEM	VALUE
UseCase	List of Invoices
Summary	The administrator views a list of the invoices (finished orders) and has access to the order details.
Actor	Administrator
Precondition	There must be at least one finished order in the system.
Postcondition	The administrator knows about all the invoices and their details.
Base Sequence	1. Press on "Show all" button.
	Admin double clicks on one of the invoices.     System showes order details on the screen.
Exception Sequence	Enter customer ID.
	Step 2-3 same as base sequence.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

#### List of Pickers

ITEM	VALUE
UseCase	List of Pickers
Summary	The administrator can view two lists, one with registered pickers at the warehouse, and one with pickers currently at work.
Actor	Administrator
Precondition	There must be at least one picker registered in the system.
Postcondition	The administrator now knows who is employed at the warehouse and who is currently working.
Base Sequence	The system will print out two lists, one of the pickers currently at work and one with the registered pickers at the warehouse.     The Administrator can double click on a picker from the list of registered pickers.     The system will print out the information about the selected picker.
Exception Sequence	Step 1: same as base sequence.  2. The Administrator searches for a picker by name.  Step 3: same as base sequence.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

## List of Suppliers

ITEM	VALUE
UseCase	List of suppliers
Summary	The administrator wants to check who is supplying the warehouse with product.
Actor	Administrator
Precondition	A supplier already exists in the system.
Postcondition	The administrator knows about the suppliers and what products they supply.
Base Sequence	Enter supplier name.     Press "Search" button.     Double click on the supplier to see the product the supplier supplies.
Exception Sequence	1. Press "Show all" button. 2. Choose supplier. 3. Same as step 3 from base sequence.
Exception Sequence 1	Step 1-2: as base sequence.  3. Pop-up warning message saying that there is no supplier with that name.
Exeption Sequence 2	Press "Search".     Pop-up warning message saying that there is no supplier name filled.
Exeption Sequence 2 Sub UseCase	2. Pop-up warning message saying that there is no supplier name filled.

## Log In

ITEM	VALUE
UseCase	Log in
Summary	
Actor	User
Precondition	The usser needs to know the password
Postcondition	Usser is loged in
Base Sequence	Chosse usser type from drop down box.     Enter password.     Press "Log in" button.
Exception Sequence	Step 1-3: as base sequence 4. System pops up a warning message saying that the passwprd is incorrect
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	

#### Make an Order

ITEM	VALUE
UseCase	Make an Order
Summary	The customer successfully makes an order that is sent directly to the warehouse.
Actor	Customer
Precondition	The customer needs more products.
Postcondition	The order is placed.
Base Sequence	1. Choose the category. 2. Select the items from that category. 3. Enter the amount (in boxes) for the selected items. 4. Click on "Add to Basket". 5. Keep repeating Steps 1-4 until all the items needed are added to the basket. 6. Press "Send" button. 7. Enter costumer ID. 8. Choose shipment date. 9.Press "Ok" button.
Exception Sequence	Step 1-9: same as base sequence. 10. System will pop up a warning message saying that the inserted ID is wrong.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

## Receiving Goods

ITEM	VALUE
UseCase	Receiving Goods
Summary	The Administrator adds the goods received from factories to the inventory and a pallet ID and place are generate for each pallet added.
Actor	Administrator
Precondition	The warehouse received ordered goods and the product ID already exists in the inventory.
Postcondition	The inventory is updated with the new goods and pallets are placed in the wa rehouse.
Base Sequence	1. Enter product ID. 2. Choose the category from the combo box. 3. Enter the number of pallets. 4. Enter the number of boxes per pallet. 5. Enter the number of items per box. 6. Enter the expiry date. 7. Enter the buying price per box. 8. Enter the selling price per box. 9. Press on the "Register" button. 10. Sytem generates locations for the pallet based on the number of pallets.
Exception Sequence	Steps 1-9: same as base sequence. 10. Pop-up warning message saying that all the fields should be filled.
Exception Sequence 1	Step 1-9: same as base sequence. 10. Pop-up warning message saying that some of the fields require numbers.
Exeption Sequence 2	Step 1-9: same as base sequence.  10. Pop-up warning message saying that the product ID does not exist.
Sub UseCase	
Note	For this page to work, the server needs to be running in order to add the information to the database.

### Remove Category

ITEM	VALUE
UseCase	Remove Category
Summary	Administrator removes a category from the inventory.
Actor	Administrator
Precondition	The category that is being removed has 0 products in it.
Postcondition	Category is removed and no longer exists in the inventory.
Base Sequence	Choose the category from the combo box.     Press on the "Remove" button.
Exception Sequence	Steps 1+2: Same as base sequence.  3. Pop - up displaying a message saying that the category cannot be deleted because the number of products wihtin that category is greater than 0 or a pallet exists with that product.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to remove the category from the database.

#### Remove Picker

ITEM	VALUE
UseCase	Remove Picker
Summary	The administrator is taking out a picker from the system.
Actor	Administrator
Precondition	There should be at least one picker registerd in the system.
Postcondition	Picker is removed from the system.
Base Sequence	1.Insert picker ID. 2.Press "Delete" button. 3.Information about picker is printed. 4.A warning pops-up which asks if the user really wants to delete that picker. 5.Press "Yes" button. 6.A warning message pops-up saying that the picker is remmoved.
Exception Sequence	Step 1-2: as base sequence.  3.A pop-up message showes up saying that the ID is incorrect.
Exception Sequence 1	Step 1-3: as base sequence. 4.Administrator decides that the picker ID is not the one he/she wanted to delete. 5.Press "Cancel" button.
Exeption Sequence 2	
Sub UseCase	
Sub UseCase	

#### Remove Product

ITEM	VALUE
UseCase	Remove Product
Summary	A product is removed from the inventory.
Actor	Administrator
Precondition	The product already exists in the inventory.
Postcondition	The product no longer exists in the inventory.
Base Sequence	1. Enter product ID. 2. Click on "Remove".
Exception Sequence	Step 1: same as base sequence.  2. System pops-up a warning message stating that a pallet with the same product ID exists and therefore the product cannot be deleted from the inventory.
Exception Sequence 1	Step 1: same as base sequence. 2. System pops-up a warning message saying that the product ID does not exist in the system.
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to upate the

#### Start Order

ITEM	VALUE
UseCase	Start Order
Summary	The picker approaches the computer and starts an order.
Actor	Picker
Precondition	An order already exists in the system as unfinished.
Postcondition	The order is moved from the "Available Orders" list to the "In Progress" list.
Base Sequence	1. System shows a list of all the orders according to the shipment date. 2. Press "Start" button. 3. Enter picker ID. 4. System prints all items from the order. 6. Press on "Ok" button.
Exception Sequence	Steps 1-6: same as base sequence. 7. System pops-up a warning message saying that the picker is not checked in or invalid.
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	Print Order
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.

## View Products of a Category

ITEM	VALUE
UseCase	View products of a category
Summary	The administrator knows about all the products within a category.
Actor	Administrator
Precondition	There should be at least one category that has products.
Postcondition	The administrator has an idea about the products fom that category.
Base Sequence	Choose category from the dropdown.     Press "Search" button.     The system prints out a list with all the products from that category.
Exception Sequence	
Exception Sequence 1	
Exeption Sequence 2	
Sub UseCase	
Note	For this page to work, the server needs to be running in order to receive informatio from the database.

## Manage Stocks

ITEM	VALUE
UseCase	Review Stocks
Summary	The administrator checks the stock that has products under a given quantity.
Actor	Administrator
Precondition	There should be at least one product in the inventory.
Postcondition	The administrator knows about the stocks under a given quantity.
Base Sequence	1. Enter product ID. 2. Enter the quantity. 3. Press "Search" button.
Exception Sequence	1. Same as base sequence: 2. 2. Press "Show all" button.
Exception Sequence 1	Step 1-2: same as base sequence.  3. Pop-up warning message saying that all fields should be filled with numbers.
Exeption Sequence 2	Step 1-2 same as exception sequence.  3. Pop-up warning message saying that the quantity needs to be filled.
Sub UseCase	
Note	For this page to work, the server needs to be running in order to retrieve the information from the database.