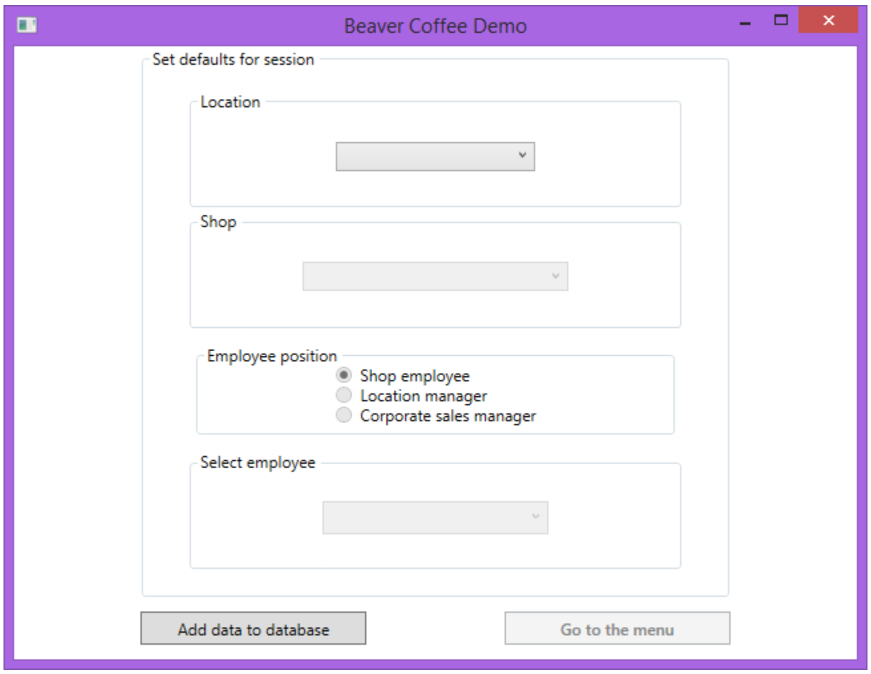
BeaverCoffee User manual

Installation instructions

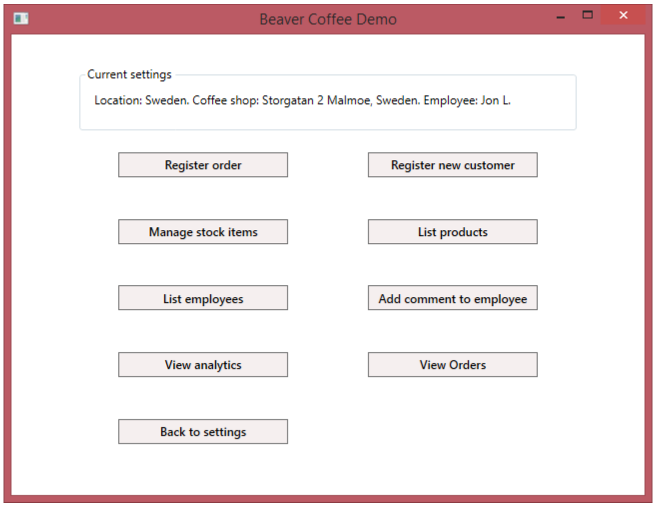
The demo is a desktop application written in C#, with a graphical user interface. It works under Windows operating systems and requires a MongoDB instance running on start-up, with default settings (localhost, port: 27017).
The database created by the application with the test data is called "coffeeshop".

Start screen



1. Click "Add data to database" to insert test data. Do this first when starting the application for the first time. Later this option can be used to clear the database and reload the initial test data. The test data includes all necessary data to test the application, except for orders (these can be registered using the appropriate functionality of the application).

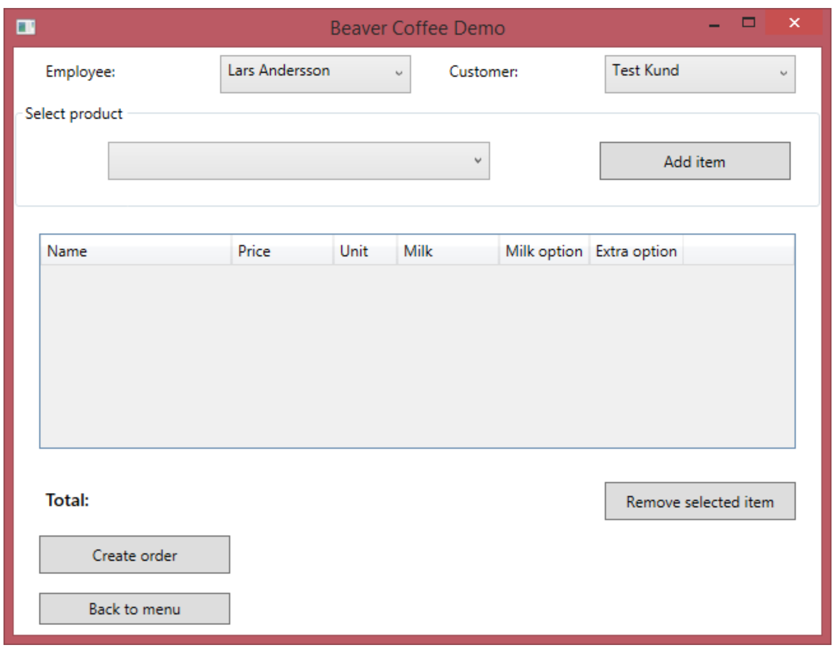
2. Next, you need to choose the default settings for the session. First select your location under "Location" (Sweden or US).
3. A default coffee shop selection will appear for the location under "Shop". Any orders processed in the session will be associated with that shop.
4. Select your employee status. A shop employee can only register orders or customers. A location manager will have access to all the functionalities, but some of these will be restricted to their location. A corporate sales manager will be able to access all functionalities across all locations.
   Managers are not expected to take customer orders. For demonstration purposes, orders can be still processed as managers, but these will be registered to an employee of the selected shop
5. In the combobox under "Select employee", the available employees with the above specifications are shown. Shop choice only restricts the list of shop employees, while location choice restricts location managers as well.
6. Click "Go to the menu" to continue.



Press a button to test the associated functionality. In the followings, functionalities will be grouped and numbered according the requirements. For each requirement, the associated menu name will be given.

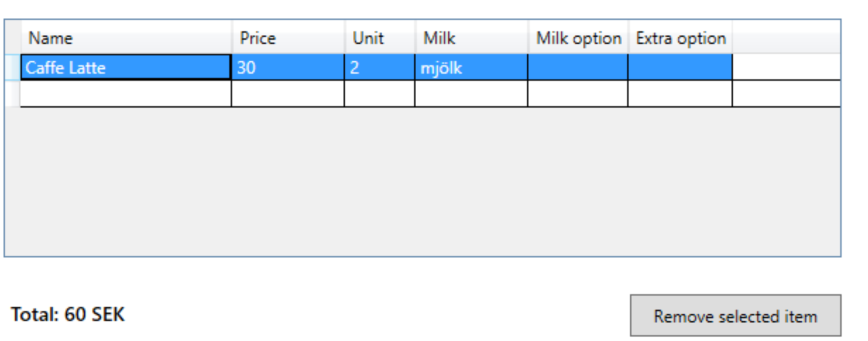
Requirement 1-3: Enter and edit an order from a customer for one or more products

Menu point: Register order



Select the customer in the top right corner. “Unregistered” means that the customer is not a BeaverCoffee club customer. The selection in the combobox corresponds to scanning the barcode of the club customer.
Next, select a product and click Add item. The product will appear in the data grid below and the order total will be automatically updated with its price, shown in the bottom left corner.
The order item can now be edited in the data grid (requirement 3), including the number of products, the type of milk used (if applicable) and extras added.
The number of items can be updated in the Unit column, by clicking on the cell, entering a new number and hitting enter. The type of milk a beverage is served with is shown under the Milk column. This can be changed using the combox in the *Milk option* column as shown in the figure below. The combobox appears when the user double-clicks the cell.

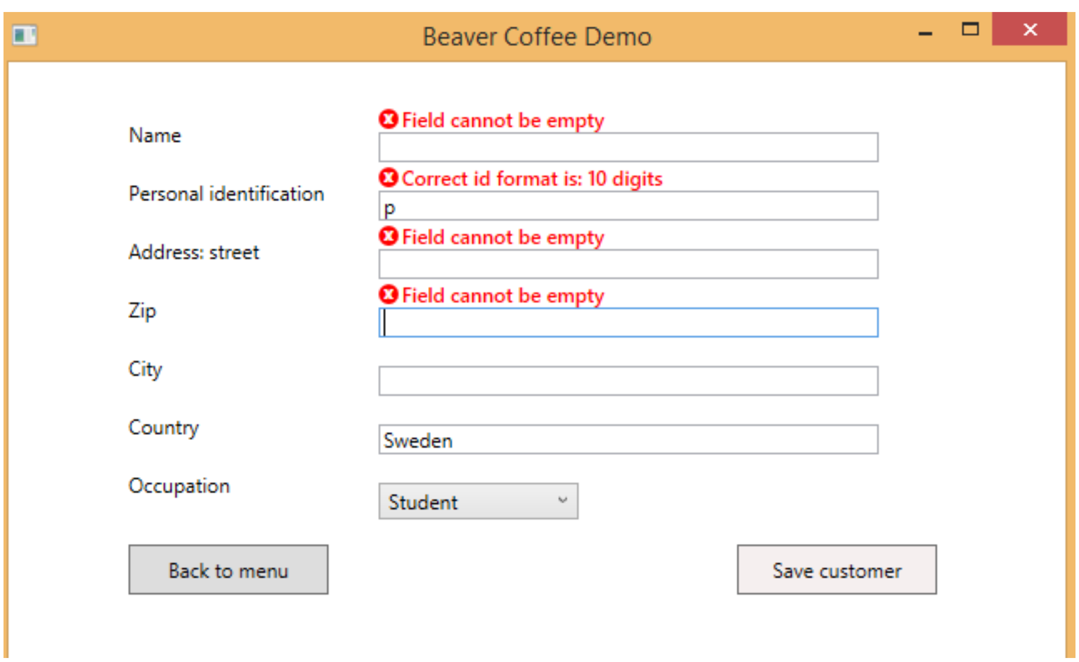
An extra option, such as flavoring or whipped cream for hot chocolate, can be added similarly, under the Extra option column. The extra option gets listed as a separate order item but its association with another product is preserved in the Order document saved in the database.
An arbitrary number of further products can be added to an order in the same way. Order items can also be removed from the order (requirement 3) by highlighting the appropriate row and clicking the button "Remove selected item".



The order is finalized and saved to the database when the user clicks "Create order" in the bottom left corner.

Requirement 5: register customer in BeaverCoffee club

Menu point: Register new customer



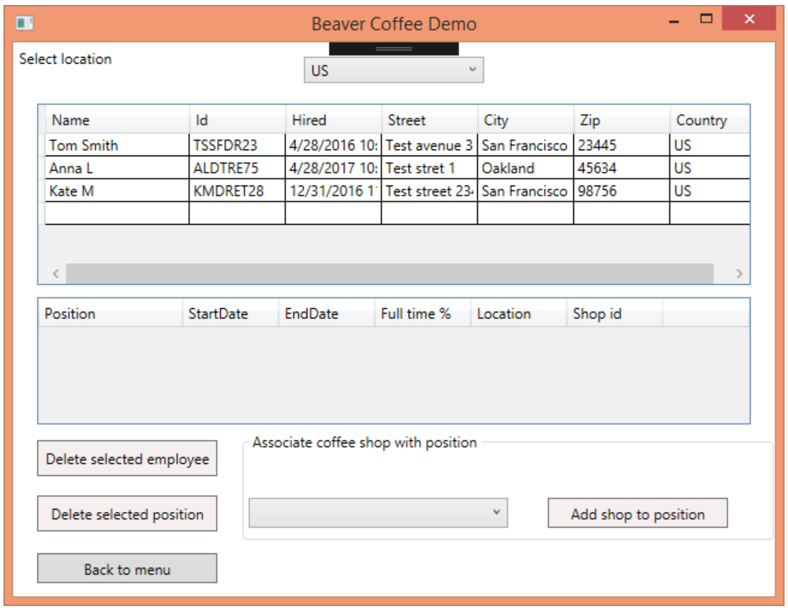
A new club customer can be registered by filling in the form above and pressing Save customer. Compulsory fields are indicated.

Personal identification format is enforced based on the location set for the current session (the US format is arbitrary, for demonstration purposes). Format specifications are retrieved from the database, from the document representing the current location.
The customer will be associated with the location of the current session (Sweden or US). When entering an order, only those club customers are listed for the customer choice that have registered at the location of the session (irrespective of the specific registering coffee shop).

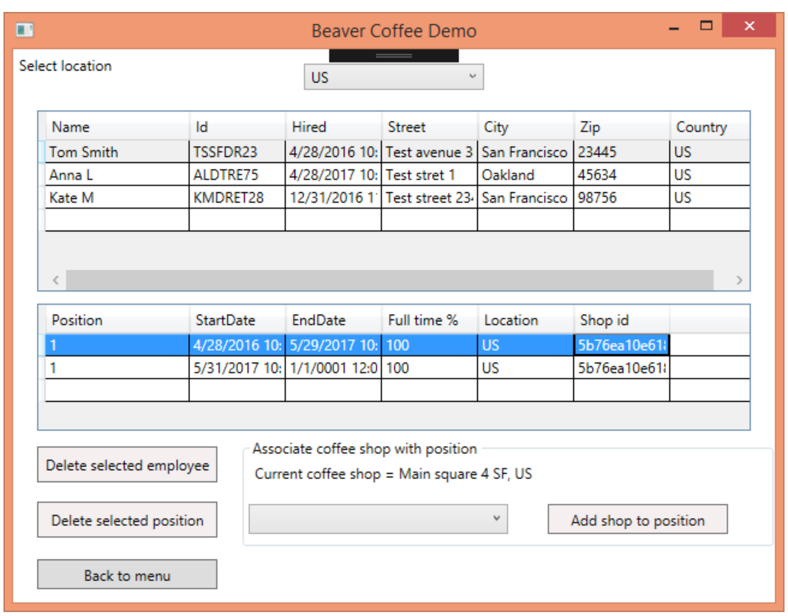
Requirement 8: keep track of employee information and employment positions

Menu point: List employees

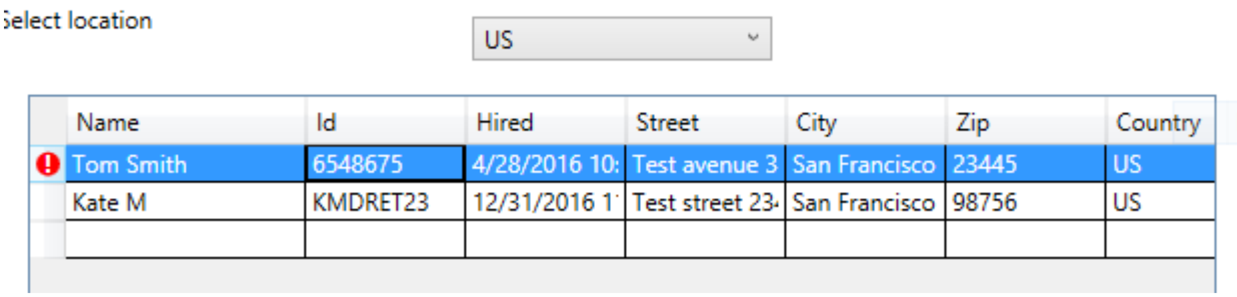
For demonstration purposes, all locations are available here, regardless of the location of the session.



After selection of a location (Sweden or US), all employees holding one or more employment positions at the location will be listed in the upper grid. When selecting a row in this upper grid, all employment positions associated with the employee are displayed in the lower grid, forming an employment history (even past positions are listed).



It is possible to edit employee information of the upper grid, as well as to add new employees and associate new positions with them by filling in the cells of a new row in the appropriate grid.
To demonstrate the way appropriate personal identification formats are enforced, editing the Id field in the upper grid (when selected location is Sweden or US) results in an error message if the format is incorrect (ids cannot be edited under the "All" locations setting). The error is indicated by an exclamation mark in a red circle in front of the row. By pointing at the exclamation mark, the error specification is shown.

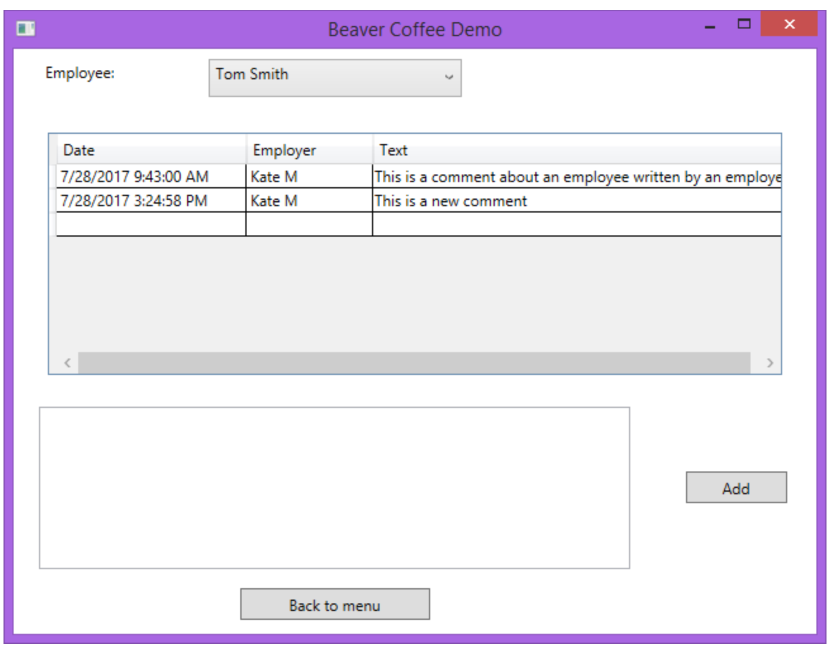


Requirement 9: employer should be able to add comments about employees

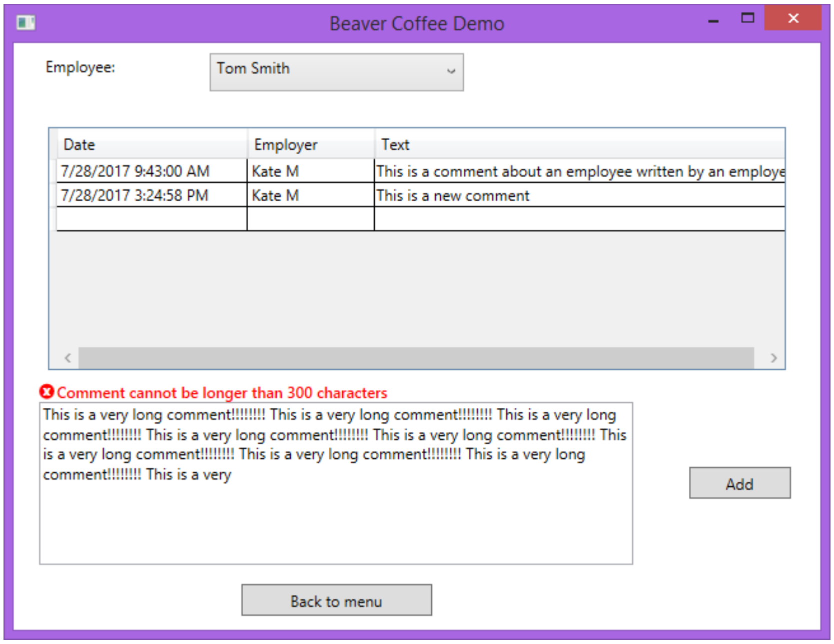
Menu point: Add comment to employee

In the demo version, users can leave comments about their employees. The list of employees of a given person is specified by Id under the "BossOver" field of the employment position document. In the demo data, each location managers can leave comments about shop employees at their specific location, and the corporate sales manager can leave comments about location managers.

By selecting the name of an employee in the top combobox, all previous comments associated with that employee are displayed. Dates displayed are in UTC time.



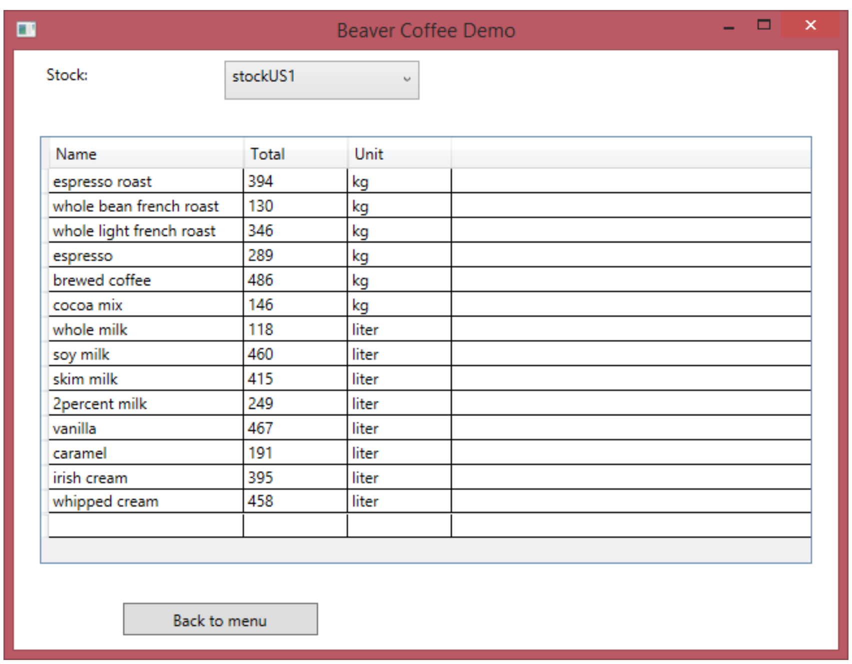
A new comment can be entered in the text field below the list, which is saved after clicking the Add button as long as the length of the text does not exceed 300 characters.



Requirement 10: keep track of available quantity in stock

Menu point: Manage stock items

By selecting a specific stock in the top combobox, available quantity for each stock item is listed. In the demo version, there is only one storage unit serving all shops at a specific location.



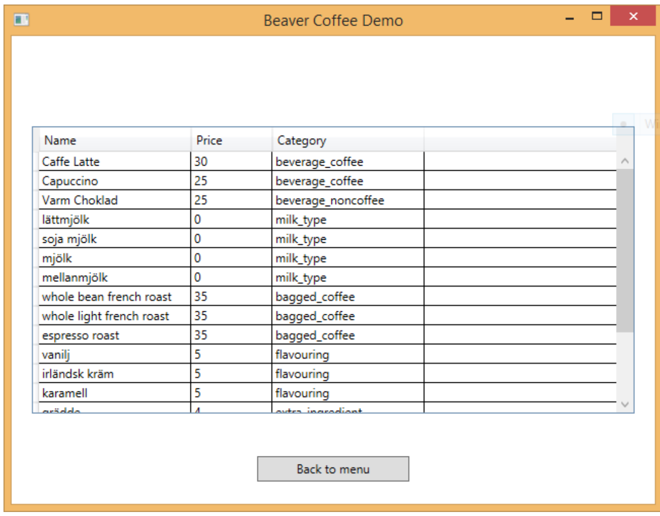
Quantities are updated automatically as orders are processed.
Certain beverages such as cappuccino, latte and hot chocolate do not have a corresponding stock item as these products are made up of other products/ingredients. For instance, latte is made up of one unit of espresso and two units of milk (whole milk or soy milk etc…) and upon processing the order, changes are made to the stock quantities of these ingredients.

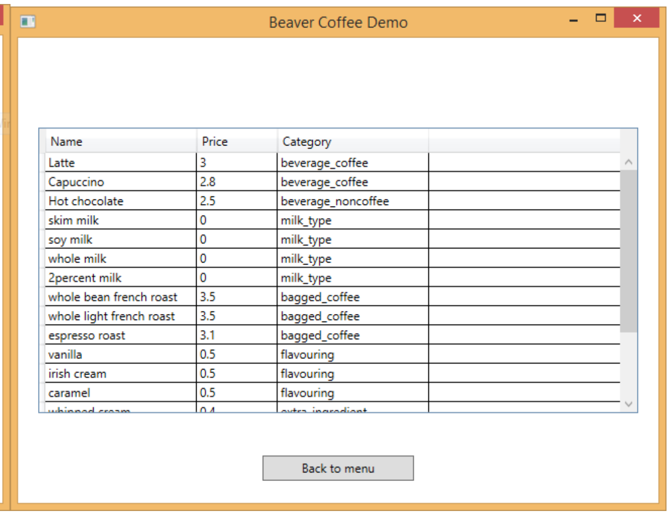
It is also possible to update the quantity of any item, by simply entering the new amount under the Total column. Negative values are not accepted.
Each update (due to order or manual update) in the quantity of a stock item is saved in the database as a stock transaction, which is then can be used to create reports for stock quantities of a product per requirement 13.4 (see below).

Requirement 11: list of products in Swedish and English

Menu point: List products

The user can view all the products offered at the location that was specified at session start. Local name, price and product category is displayed here. Ingredients not sold separately or as add-ons to products cost 0.

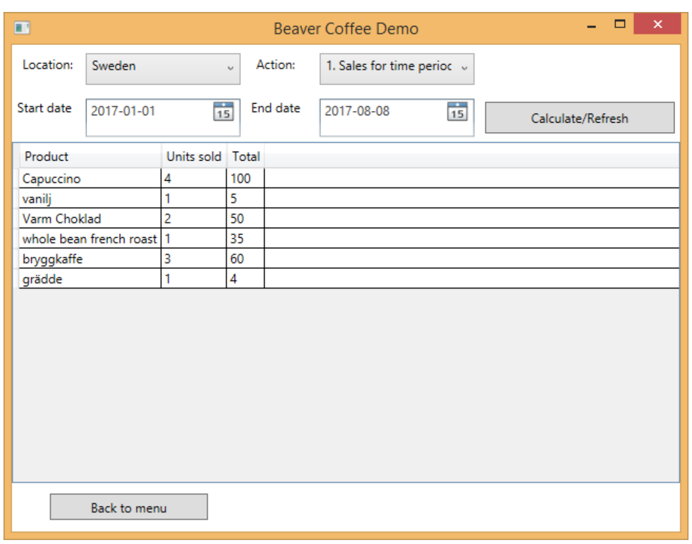




Requirement 13.1: create reports on sales for any specified time period

Menu point: View analytics

In the top menu, select "1. Sales for time period" as an Action, specify a date range below (by entering the start and the end date, inclusive, of the period) and press Calculate. The name of the product, number of units sold in the time period and price in local currency (column Total) are shown.

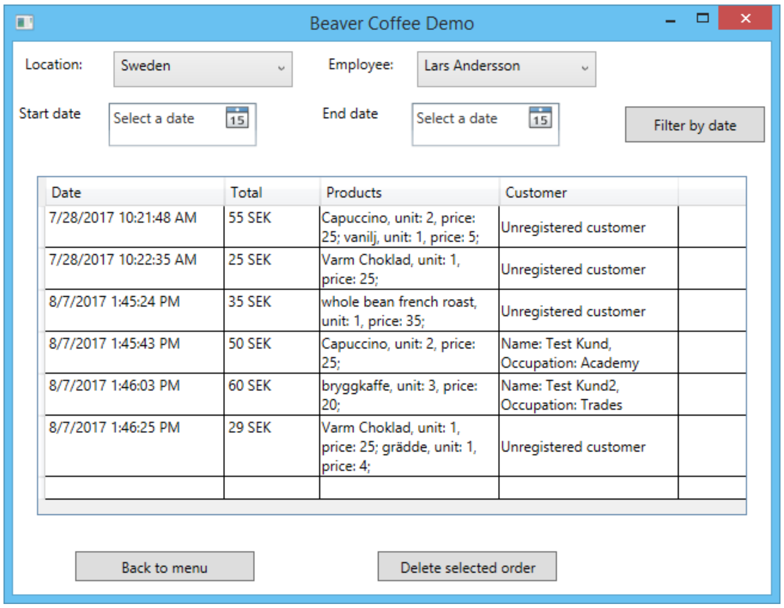


Corporate sales manager can create reports that are calculated across all locations by selecting “All locations” as a Location in the top menu.

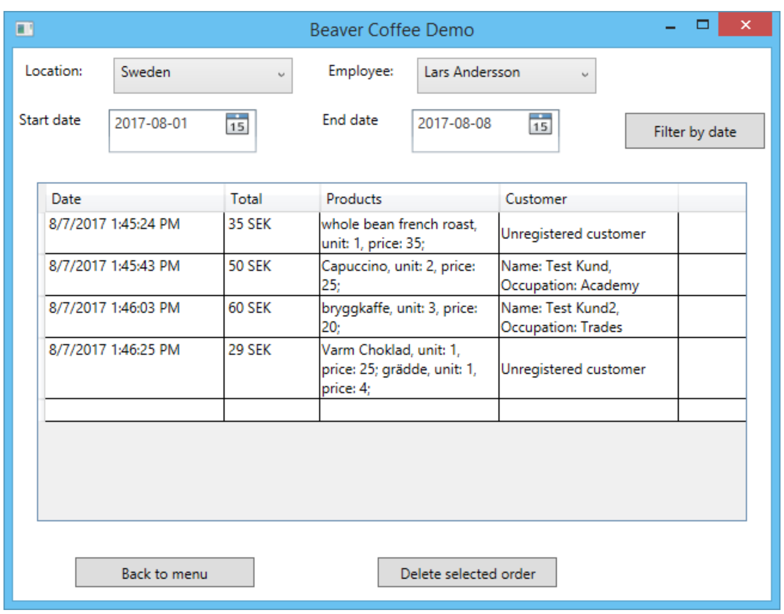
Requirement 13.5: orders served by an employee for a specified time period

Menu point: View orders

In the top menu, first select the location (there is only one option here for location managers, but corporate sales managers can view All locations). Next, select an employee from the list of shop employees at the specific location. Orders served by that employee will be displayed below, one row per order. Dates displayed are in UTC time.



By specifying a start and an end date (inclusive) of a time period, only orders served during that time period will be displayed after pressing the Filter by date button.



Requirement 13.4: Stock quantities of a product for any specified time period

Requirement implemented in demo under menu item View Analytics.

In the top menu, select '4. Stock quantities of a product' as an action. Another combobox appears for selecting the specific stock item. Press the calculate button. Changes in quantities of a stock item, as well as the stock quantity at the beginning and the end of the given period is displayed.
This functionality is supported by registering a transaction (with timestamp and quantity change specification) in a StockTransaction document in the database each time the quantity of a stock item decreases or increases.