Joe’s Sales Tracker Application – Description & User Manual

Description

The Sales Tracker application allows users to maintain a products catalog, maintain a roster of salespeople, and also enter and track sales transactions. The system requires a user to login, and based on whether that user is an End User or Administrator, the appropriate functionality is made available.

Tables

The Sales Tracker application consists of 4 key tables. The products table stores information about each product that can be used in a sales transaction. Each products has a product ID, a name, a flag indicating if the product is active or not, a price and a category (used to easily filter products and sales transactions). Each product also has a maximum discount which is used in the validation process as sales transactions are entered (see below). The salespeople table contains information about each salesperson, including hire date and termination date. The sales_transactions table contains information for sales, including foreign keys to the salespeople and products tables.

Key Features

The Sales Tracker provides the following features:

- UI to add, edit or delete users
- UI to add, edit or delete products
- UI to add, edit or delete salespeople
- UI to add edit or delete sales transactions
- Validation of all input to assure successful database updates (see below)
- Ability to sort the users, products, salespeople and sales transaction lists by key column headers
- Ability to filter (search) users, products, salespeople and sales transactions by key fields so that items can easily be found in each of these tables
- Ability to print a sales report after the sales transactions have been filtered and/or sorted
- Ability to assign users a role (End User or Administrator) which restricts which features the user has access to
- Ability to access this document from within the application
- Flash messages are used so that the user knows which user / product / salesperson / sales transaction was recently added / edited / deleted.
- Users with the “End User” role assigned can update their own profile, changing their name, email and/or password. End Users cannot change their role (no other options available in the dropdown).

Validations

The following input validation has been implemented. Input errors are displayed below the field where the error occurred so that the user is clear what needs to be corrected.

- All required fields are validated using Laravel validation
- All fields requiring numeric values are validated using Laravel validation
- Email fields are validated using Laravel validation
- When sales transactions are entered, a check is done to assure the discount applied to the sale does not exceed the max discount defined for that product. This is done using Javascript and HTML5
- Only active products (based on flag in products table) and active salespeople (based on termination date) can be added to new sales transactions. This is done by dynamically loading the proper entries into the dropdowns as transactions are added.
- Password confirmations are validated using Laravel validation.

How to Use the Application

User Profiles / Logging In

Users must login to use the application. No menu options are available until a user has successfully logged in. Users cannot register their own account – the application assumes an administrator will set up new users. Each user will have one of two roles – End User or Administrator. Users that have been assigned the "End User" role will only be able to maintain sales transactions and update their own profile. Administrators will be able to maintain the products catalog, the salesperson roster, and the users table.

Using the Maintenance Functions

A consistent UI has been implemented for all functions. This description will use the sales transaction UI as an example, but the UI is the same for products, users and salespeople.

When the "Maintain Sales Transactions" function is accessed, the user is presented with a list of sales transactions in revers chronological order. For performance reasons, the most recent 100 transactions are listed. The user can filter the list down to any date range, and even filter on specific products or product categories or salesperson. Filtering can also be done in combination (i.e. all sales for a particular salesperson for a specific date range. The list can also be sorted by clicking on any column header that is colored blue. Clicking on the same column header twice will reverse the sort.

In addition to filtering and sorting, the user can add, edit of delete sales transactions. The button to add is shown above the list, and clicking on it will present the form to add a new sales transaction. The icons for edit and delete functions are shown on each row in the table at the far right (hovering shows tooltips).

Adding and editing items is self-explanatory. Simply edit / enter the information and click the save button. Input will be validated for form and completeness. If validation succeeds, the user will be brought back to the master list and a message will be displayed indicating the success of the change. Deleting is permanent – you cannot get the data back. You will not be allowed to delete a salesperson or a product that has been used in a sales transaction.

The planning document for this application, including a database diagram, can be found here:

https://docs.google.com/document/d/1VLzEbiaVaXqL3r0bUsFe07TPFCrsuvhhzM5UNf7gaCs/edit#heading=h.9jqtzjpjb2cj