

SAF Rental Management System (Excel VBA)

Project Overview

This project is an Excel-based rental management system for **SAF**, developed using **VBA**. The system aims to streamline the rental process, handling customer data, new rental orders, dress collection, and rental history display. The SAF system includes user forms and automated processes to manage daily business operations, eliminating the need for manual data entry in SAF's expanding inventory.

Features

Main Functional Modules:

1. **Main Menu Form:**
 - Central hub with buttons to navigate to key modules: Customer Information, New Order, Complete Rental, and Display Rental.
2. **Customer Information Form:**
 - Allows adding, modifying, and deleting customer records.
 - Automatically generates a new unique Customer ID for new entries.
3. **New Order Form:**
 - Enables users to create new rental orders.
 - Includes options to add multiple dresses to one order.
 - Auto-generates a Rental ID and highlights relevant fields for later data entry.
4. **Complete Rental Form:**
 - Finalises rentals and updates return information.
 - Calculates total rental cost based on dress type, rental duration, and delivery fees.
 - Offers manual and automatic data import options for returns, updating SAF's database accordingly.
5. **Display Rental Form:**
 - Displays historical rental data for selected customers within a specified date range.
 - Includes functionality to export this data to PDF for record-keeping.

System Requirements

- **Microsoft Excel (Office 2019 or Microsoft 365).**
- **VBA version 6.0** (this project is incompatible with VB.NET).

Installation and Setup

1. **Download and Open:**
 - Save the provided **.xlsm** file to a local folder.
 - Open the file in Microsoft Excel, ensuring macros are enabled.
2. **Initial Setup:**
 - On the first worksheet ("Menu"), review group and author details.
 - Read through instructions provided within the workbook for module-specific guidance.
3. **Enable Macros:**
 - When prompted, select **Enable Content** to activate macros and forms.

Instructions for Use

1. Accessing the Main Menu

- Upon opening, the **Main Menu** form appears. If closed, it can be reopened via the **Show Menu** button on the "Menu" worksheet.

2. Managing Customer Information

- Click **Customer Information** to open the form.
- To add a customer, enter relevant details and confirm. For modifications, input the Customer ID to load existing data.
- Changes are saved automatically upon confirmation.

3. Creating New Orders

- Click **New Order** to open the New Order form.
- Select a customer, choose dresses, and specify rental start date.
- Click **Confirm** to save the new order to the **Rental** worksheet.

4. Completing Rentals

- Use **Complete Rental** to process dress returns.
- Select dresses from current rentals, enter return details, and click **Complete** to finalise the rental and calculate total cost.
- The form also allows data import from an Excel file to automate entry.

5. Viewing and Exporting Rental History

- Open **Display Rental** to access rental records.
- Choose a customer, specify dates, and view completed rentals within the range.
- Click **Export to PDF** to save the report in PDF format.

Documentation and Code Structure

- **Code Readability:** Variables and constants follow naming conventions for clarity. Each procedure includes comments for easy reference.
- **Error Handling and Validation:**
 - Data validation is applied to forms to prevent invalid inputs.
 - Clear error messages guide users in case of input mistakes.

Known Assumptions and Limitations

- **Data:** The system uses sample data structures per SAF's requirements. Data is not fully normalised due to scope constraints.
- **Business Scope:** The system currently covers key functionalities; additional features like tracking customer preferences are outside the scope.