Inventory Management System

Documentation

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Contents

1 Introduction

This document provides a comprehensive description and documentation for the Inventory Management System, a powerful application designed to streamline inventory management processes. The system offers a wide range of features to help businesses efficiently manage their product inventory.

2 Features

The Inventory Management System boasts the following robust features:

- Add, update, and delete products
- View products with color-coded quantity indicators
- Save and load inventory to/from a CSV file
- Export CSV file to Excel or PDF
- Customizable appearance themes for the application
- Dialog boxes for error or success notifications
- RED - Highlight for quantity less than 100
- YELLOW - Highlight for quantity less than 1000
- GREEN - Highlight for quantity more than 1000

3 Product Management

3.1 Adding a New Product

To add a new product to the inventory, follow these steps:

1. Click on the "Add Product" button in the main window.
2. In the "Add Product" dialog box, enter the product details such as name, description, category, and quantity.
3. Click the "Save" button to add the new product to the inventory.
4. A success dialog box will appear, confirming the addition of the new product.

3.2 Updating an Existing Product

To update the details of an existing product, follow these steps:

1. Select the product you want to update from the product list in the main window.
2. Click on the "Update Product" button.
3. In the "Update Product" dialog box, modify the product details as needed.
4. Click the "Save" button to update the product in the inventory.
5. A success dialog box will appear, confirming the update of the product.

3.3 Deleting a Product

To remove a product from the inventory, follow these steps:

1. Select the product you want to delete from the product list in the main window.
2. Click on the "Delete Product" button.
3. A confirmation dialog box will appear, asking you to confirm the deletion.
4. Click "Yes" to proceed with the deletion or "No" to cancel the operation.
5. If you confirmed the deletion, a success dialog box will appear, indicating that the product has been removed from the inventory.

4 Color-coded Quantity Indicators

The Inventory Management System provides a visual representation of product quantities using color-coded indicators. The colors are assigned based on the following criteria:

- RED - Highlight for quantity less than 100

- YELLOW - Highlight for quantity less than 1000

- GREEN - Highlight for quantity more than 1000

This feature allows you to quickly identify products with low or high quantities at a glance, making it easier to manage stock levels and prioritize reordering or restocking efforts.

5 Saving and Loading Inventory

The Inventory Management System allows you to save your current inventory to a CSV file and load an existing inventory from a CSV file.

5.1 Saving Inventory to a CSV File

To save the current inventory to a CSV file, follow these steps:

1. Click on the "Save Inventory" button in the main window.

2. In the "Save Inventory" dialog box, navigate to the desired location and enter a file name for the CSV file.

3. Click the "Save" button to save the inventory to the specified CSV file.

4. A success dialog box will appear, confirming that the inventory has been saved successfully.

5.2 Loading Inventory from a CSV File

To load an existing inventory from a CSV file, follow these steps:

1. Click on the "Load Inventory" button in the main window.

2. In the "Load Inventory" dialog box, navigate to the location of the CSV file and select it.

3. Click the "Open" button to load the inventory from the selected CSV file.

4. A success dialog box will appear, confirming that the inventory has been loaded successfully.

6 Exporting to Excel or PDF

The Inventory Management System provides the ability to export the current inventory data to Excel or PDF format for further analysis or sharing.

6.1 Exporting to Excel

To export the inventory data to an Excel file, follow these steps:

1. Click on the "Export to Excel" button in the main window.

2. In the "Export to Excel" dialog box, navigate to the desired location and enter a file name for the Excel file.

3. Click the "Save" button to export the inventory data to the specified Excel file.

4. A success dialog box will appear, confirming that the export to Excel has been completed successfully.

6.2 Exporting to PDF

To export the inventory data to a PDF file, follow these steps:

(a) Click on the "Export to PDF" button in the main window.

(b) In the "Export to PDF" dialog box, navigate to the desired location and enter a file name for the PDF file.

(c) Click the "Save" button to export the inventory data to the specified PDF file.

(d) A success dialog box will appear, confirming that the export to PDF has been completed successfully.

7 Appearance Themes

The Inventory Management System allows you to customize the appearance of the application by selecting from a variety of predefined themes.

7.1 Changing the Appearance Theme

To change the appearance theme of the application, follow these steps:

(a) Click on the "Settings" button in the main window.

(b) In the "Settings" dialog box, navigate to the "Appearance" tab.

(c) Select the desired theme from the list of available themes.

(d) Click the "Apply" button to apply the selected theme to the application.

(e) The application's appearance will be updated immediately, reflecting the chosen theme.

8 Dialog Boxes for Errors or Success

The Inventory Management System provides dialog boxes to inform users about errors or successful operations.

8.1 Error Dialog Boxes

Error dialog boxes will appear when an error occurs during an operation, such as:

- Failed to save or load inventory from a CSV file
- Failed to export to Excel or PDF
- Invalid input or missing data during product addition or update

These dialog boxes will provide detailed information about the error, helping you troubleshoot and resolve the issue.

8.2 Successful Dialog Boxes

Successful dialog boxes will appear when an operation is completed successfully, such as:

- Product added successfully
- Product updated successfully
- Product deleted successfully
- Inventory saved or loaded successfully
- Export to Excel or PDF completed successfully

These dialog boxes provide confirmation that the requested operation has been performed correctly, ensuring a seamless user experience.