Exploring FrontAccounting: An Open Source Accounting Software

09.08.2023

—

Adnan Malik
Web Developer

Overview

Open Source Accounting Software: Exploring FrontAccounting

FrontAccounting is a web-based, open-source accounting software written in PHP and utilizing MySQL as its database. Tailored for small and medium-sized businesses, this software offers an extensive array of features, making it a versatile solution for financial management.

Features of FrontAccounting

1. FrontAccounting covers a wide spectrum of functionalities, including:
2. Invoicing: Easily create and send invoices to customers, streamlining billing processes.
3. Expense Tracking: Efficiently monitor expenses, from travel costs to office supplies and marketing expenses.
4. Accounts Payable: Seamlessly manage owed bills to vendors, ensuring timely payments.
5. Accounts Receivable: Keep track of customer payments and outstanding amounts.
6. Financial Reporting: Generate comprehensive financial reports such as income statements, balance sheets, and cash flow statements.
7. Inventory Management: Monitor inventory levels and associated costs for effective stock management.
8. Manufacturing: Track production costs and schedules to streamline manufacturing operations.
9. CRM Integration: Effectively manage customer relationships, enhancing customer engagement and satisfaction.
10. Project Management: Monitor the progress and costs of projects, aiding efficient project management.

Advantages of FrontAccounting

FrontAccounting offers several advantages that make it a compelling choice for businesses:

I. Cost Efficiency:

As an open-source solution, FrontAccounting eliminates the need for costly licenses or subscriptions. This makes it particularly appealing for small and medium-sized enterprises looking to manage their finances effectively without a significant financial burden.

II. Customizability:

Businesses can tailor FrontAccounting to their specific requirements. The open-source nature of the software allows for modifications and enhancements, ensuring a seamless alignment with unique business needs. For instance, modifications can be made to adapt to industry-specific processes or integrate with other software tools.

III. Community Support and Collaboration:

FrontAccounting boasts an active user community and forums where users can seek assistance, share experiences, and collaborate on problem-solving. This sense of community fosters a supportive environment, enabling users to tap into a wealth of knowledge and troubleshoot issues efficiently.

Technical Specifications of FrontAccounting

- System Requirements: FrontAccounting requires a web server with PHP 7.2 or higher, MySQL 5.7 or higher, and a web browser that supports HTML5 and CSS3.
- License: FrontAccounting is released under the GNU General Public License (GPL), which means it is free to use and modify.
- Support: FrontAccounting is supported by a community of developers and users. There is a forum where users can ask questions and get help from other users. There is also a documentation website that provides detailed instructions on how to use FrontAccounting.
- Security: FrontAccounting uses industry-standard security measures to protect your data. This includes password protection, encryption, and user access controls.
- Scalability: FrontAccounting can be scaled to meet the needs of growing businesses. It can be used by businesses of all sizes, from small businesses to large enterprises.

Software Design pattern used by FrontAccounting

FrontAccounting uses the Model-View-Controller **(MVC)** design pattern to structure its codebase. The MVC pattern is a common architectural pattern used in software development to separate an application into three interconnected components: Model,

View, and Controller. Each component has a distinct responsibility, promoting modularity and maintainability.

Programming and Logic in FrontAccounting

FrontAccounting is built using **PHP**, a server-side scripting language and **Javascript**, **Html** **Css** for client side. The software adheres to the Model-View-Controller **(MVC)** design pattern, which separates components as follows:

Model: Manages data and business logic, including core functions and database interactions.

View: Presents data and handles user interface interactions.

Controller: Acts as an intermediary between the Model and View, managing user inputs and updating the Model accordingly.

This architecture enhances code organization, reusability, and maintenance, ensuring the software remains adaptable and efficient.

OOP: FrontAccounting uses object-oriented programming (OOP) to structure its code. OOP allows for code to be reused and makes it easier to maintain the code.

MySQL: FrontAccounting uses MySQL as its database. MySQL is a relational database management system that is used to store the data for FrontAccounting.

Customizing FrontAccounting

Understand the Codebase:

Familiarize yourself with FrontAccounting's architecture to identify areas for modification.

I. https://github.com/FrontAccountingERP/FA
II. https://sourceforge.net/projects/frontaccounting/files/FrontAccounting%202.4/2.4.7/frontaccounting-2.4.7.zip/download

Development Environment:

Set up a local environment with necessary tools such as a text editor, PHP server, and MySQL database.

Fork and Clone: Fork the official FrontAccounting repository on platforms like GitHub and clone it to your local environment using Git.

Implement Changes: Modify relevant files to introduce desired features. Document changes for clarity.

Rigorous Testing: Thoroughly test modifications in a controlled environment to ensure functionality and prevent disruptions.

API Integration

FrontAccounting supports integration with various applications through APIs, including:

Xero API: Syncs accounting data between FrontAccounting and Xero, a cloud-based accounting software.

QuickBooks API: Seamlessly integrates FrontAccounting with QuickBooks for efficient data synchronization.

Stripe API: Connects FrontAccounting with Stripe, enabling payment processing directly through the software.

PayPal API: Integrates FrontAccounting with PayPal, facilitating customer payments through the platform.

Zapier API: Links FrontAccounting with a wide array of other applications, enhancing connectivity and automation.

Best of Luck:)