PHP Accounting Application

Version 2.0

Professional Financial Management System

Document Type:	System Documentation
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Requirements:	PHP 7.4+, MySQL 5.7+

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1. Features

Core Functionality

- Multi-Account Management: Track multiple bank accounts, credit cards, investments

- Transaction Tracking: Record income and expenses with detailed categorization

- Double-Entry Accounting: Proper accounting with source and destination accounts

- Real-time Balance Updates: Automatic balance calculations

- Multi-Currency Support: Handle transactions in different currencies

Advanced Features

- User Management: Role-based access control (Admin/User)

- Audit Trail: Complete logging of all system activities

- Financial Reports: Income/Expense, Cash Flow, Balance Sheet

- Budget Management: Set and track category budgets

- Tax Tracking: Mark tax-deductible expenses

- Data Export: Export reports to CSV format

- Dark Mode: Modern light/dark theme toggle

Security Features

- Secure Authentication: Password hashing with bcrypt

- Session Management: Secure session handling

- CSRF Protection: Token-based form protection

- SQL Injection Prevention: Prepared statements throughout

- XSS Protection: Input sanitization and output encoding

- Audit Logging: Track all user activities

2. System Requirements

- PHP 7.4 or higher

- MySQL 5.7+ or MariaDB 10.2+

- Web server (Apache/Nginx)

- Modern web browser with JavaScript enabled

- Minimum 100MB disk space

- SSL certificate recommended for production

3. Installation Guide

Step 1: Database Setup

Create a new MySQL database:

```
CREATE DATABASE accounting_app
CHARACTER SET utf8mb4
COLLATE utf8mb4_unicode_ci;
```

Import the database schema:

```
mysql -u your_username -p accounting_app < database.sql
```

Step 2: Configure Database Connection

Edit db_connect.php with your database credentials:

```
$db_config = [
    'host'     => '127.0.0.1',
    'port'     => '3306',
    'database' => 'accounting_app',
    'username' => 'your_username',
    'password' => 'your_password',
    'charset'  => 'utf8mb4',
];
```

Step 3: File Setup

Copy all files to your web server directory and set appropriate permissions:

```
chmod 755 /var/www/html/accounting
chmod 644 /var/www/html/accounting/*.php
```

Step 4: Access the Application

Navigate to: http://your-server/accounting/

4. Default Login Credentials

■■ **Important:** Change these passwords immediately after first login!

Account Type	Username	Password
Administrator	admin	Admin@123
Regular User	user1	User@123

5. User Guide

Getting Started

1. Login: Use the provided credentials to access the system

2. Dashboard: View your financial overview and recent transactions

3. Add Accounts: Set up your bank accounts, credit cards, etc.

4. Create Categories: Define income and expense categories

5. Record Transactions: Start tracking your financial activities

Account Types

Checking	Regular bank checking accounts
Savings	Savings accounts
Credit Card	Credit card accounts (negative balance)
Investment	Investment and brokerage accounts
Cash	Physical cash tracking
Loan	Loan accounts
Asset	Fixed assets
Other	Custom account types

Transaction Types

- Income: Money coming in (salary, freelance, interest)

- Expense: Money going out (rent, groceries, utilities)

- Transfer: Moving money between accounts

6. Technical Architecture

Database Schema

The application uses a normalized MySQL database with the following main tables:

- **users: User accounts and authentication**

- **currencies: Multi-currency support**

- **account_holders: Account owner information**

- **accounts: Bank accounts and financial accounts**

- **categories: Income/expense categories**

- **transactions: Financial transactions**

- **audit_log: System activity tracking**

Security Implementation

- Password Security: Using PHP's password_hash() with bcrypt

- SQL Injection Prevention: PDO prepared statements

- XSS Protection: htmlspecialchars() for all output

- CSRF Protection: Token validation on forms

- Session Security: Secure session configuration

Code Structure

```
MVC-like Architecture:
- index.php: Main controller and router
- db_connect.php: Database connection
- functions.php: Helper functions
- pages/: Individual page views
- style.css: Complete styling
```

7. Configuration

Environment Variables

Set environment mode in db_connect.php:

```
define('ENVIRONMENT', 'production'); // or 'development'
```

Customization Options

- Theme Colors: Edit CSS variables in style.css
- Currency: Add new currencies in the admin panel
- Categories: Customize income/expense categories
- Account Types: Modify available account types in code
- Reports: Extend reporting functionality in functions.php

8. Troubleshooting

Common Issues and Solutions

Database Connection Error

- Check database credentials in db_connect.php

- Ensure MySQL service is running

- Verify database exists and user has permissions

Login Issues

- Check password requirements (8+ chars, mixed case, numbers)

- Verify user is active in database

- Clear browser cookies/session

- Check PHP session configuration

Balance Discrepancies

- Run balance recalculation query

- Check for unreconciled transactions

- Verify starting balances

- Review transaction dates and accounts

Debug Mode

Enable debug mode for detailed error messages:

```
define('ENVIRONMENT', 'development');
```

9. Development Roadmap

Version 2.1 (Planned)

- Receipt attachment support

- Recurring transactions

- Advanced search filters

- Mobile app API

- Email notifications

Version 2.2 (Future)

- Bank sync integration

- Advanced reporting dashboard

- Multi-language support

- Backup scheduling

- Two-factor authentication

10. License

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- Documentation website for detailed guides

- Community forum for discussions

- Email support for licensed users

Thank you for using PHP Accounting Application!

Built with ❤■ using PHP and MySQL