User Manual

for

Digital Wallet Management System

Prepared by

Group: 09

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Contents

Contents ii

1 Introduction 1

1.1 Document Objectives 1

1.2 Intended Audience and Document Overview 1

2 getting started 1

2.1 Requirements 1

3 project Overview 2

3.1 Overview Of Digital Wallet Mangement System 2

3.2 Key Features 2

3.3 System Components 3

3.4 Benefits 3

3.5 Target Users 3

4 dashboard overview 3

4.1 Home Page 3

4.2 Admin Page 4

5 Making Payment 5

6 Money Request management 5

7 Wallet Management 6

8 Transaction Management 7

9 Integration with other services 7

10 User Profile and Settings 8

11 trouble shooting 9

12 contact and support 11

# 

# Introduction

## Document Objectives

This document serves as the **User Manual** for the **Digital Wallet Management System (DWMS)**. It provides a comprehensive guide on how to use the system efficiently, covering features such as account creation, transaction management, fund transfers, security settings, and troubleshooting. The manual is designed to assist users in understanding the system’s functionalities and to ensure a seamless experience while using the digital wallet.

## Intended Audience and Document Overview

### ****Intended Audience****

* Individuals using the digital wallet for transactions, fund management, and payments.

This manual is structured as follows:

* **Section 1:** Introduction, document purpose, audience, definitions, and references.
* **Section 2:** Prerequisites and how to get started with Website.
* **Section 2:** Instructions on account creation and logging into the system.
* **Section 3-5:** Wallet management, payments, and security settings.
* **Section 6-7:** Transaction tracking, troubleshooting, and customer support.

# Getting Started

## Requirements

### Hardware Requirements

* **PC, laptop, or mobile device** with a compatible web browser
* A **stable internet connection** for seamless transactions

### Software Requirements to access website

* Our website is deployed on Vercel.
* You can access it via browser using URL : <https://digital-wallet-management-system.vercel.app/>
* If you want to install it Locally follow below steps:
  + Install NodeJs from official website
  + Unzip dbms\_cs03\_09.zip
  + Move to code folder
  + Open terminal and use command ‘npm install’
  + Wait for some time till it gathers and installs all dependencies
  + Then use command `npm run dev` to locally open a dev server.
  + Go to <http://localhost:3000/> to access the website.

# Project Overview

## Overview of Digital Wallet Management System

The **Digital Wallet Management System (DWMS)** is a secure and user-friendly platform that allows users to **store, transfer, and manage funds** digitally. It provides seamless transactions, real-time balance tracking, and secure authentication, making it an efficient alternative to traditional banking systems.

## Key features

* **User Registration & Authentication** – Secure login via **Clerk**, OAuth, or email/password authentication.
* **Fund Management** – Add money, withdraw, and view transaction history.
* **Secure Transactions** – Send/receive payments with **using wallet password.**
* **Transaction History & Analytics** – View transaction history.
* **Security & Fraud Prevention** – **Two-Factor Authentication (2FA)** for email while signup.
* **Mobile & Web Support** – Fully responsive design for both web and mobile devices.

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## System components

* **Frontend (Next.js + Tailwind CSS)** – A fast and responsive user interface.
* **Backend (Node.js + Prisma)** – Manages transactions, authentication, and business logic.
* **Database (PostgreSQL)** – Stores user details, transactions, and logs.

## Benefits

* **Fast & Efficient** – Instant fund transfers and real-time balance updates.
* **User-Friendly Interface** – Simple and intuitive design for all users.
* **Multi-Platform Accessibility** – Works on desktops, tablets, and smartphones.

## Target Users

* I**ndividuals** – For personal transactions and bill payments.
* **Businesses & Merchants** – To accept digital payments.
* **Educational Institutions** – To manage student transactions

# Dashboard Overview

## The **Dashboard** serves as the **central hub** where users can view their wallet balance, recent transactions, and access essential features like sending money, managing funds, and viewing reports.

## Home Page

* If user is not Authenticated the homepage automatically redirects user to SignIn page Where user can Enter his details or Login with OAuth using Google or Github account.
* 2FA is enabled for Security.
* On the Home Page user can access the important functionalities like Send Money, Money Request and Wallet Management pages.
* Also user can view a List of his Past Transactions.

## Admin Page

### ****. Navigation Panel****

**It has two options to select.**

* + **Dashboard**
  + **Users**

### ****2. Key Metrics****

* **Total Users**: Displays the number of users .
* **Total Transactions**: Shows total transactions.
* **Total Volume**: Displays the total transaction volume.
* **Active Cards**: Shows the number of active cards.

### ****3. Transaction Analytics****

* **Transaction Volume Chart**:
  + A **graphical representation** of monthly transaction volume.
  + Shows Trends over past Months
* **Transaction Types (Pie Chart)**:
  + **Payments**
  + **Deposits**
  + **Withdrawals**

# Making payments

The **Send Money** feature allows users to transfer funds quickly and securely. Users can search for recipients using their name or email and initiate a payment with a simple click. Each contact entry displays:

The recipient’s name and email address

A **"Send Money"** button for initiating the transaction

Once the **"Send Money**" button is clicked, the user is required to:

1. Enter the amount they wish to send.

2. Provide their **PIN** for authentication.

3. The system checks if the account balance is sufficient for the transaction.

If the balance is greater than or equal to the entered amount, the transaction is processed successfully.

If the balance is less than the entered amount, an **"Invalid Request"** error is displayed, preventing the transaction

# Money Request Management

The Request Management feature allows users to handle money requests efficiently. This section includes three key components:

1. **Send Request**

Users can initiate a new request by:

Entering the recipient's name or selecting from user list.

Specifying the amount they are requesting.

Submitting the request for the recipient's approval.

2. **Received Requests**

This list displays incoming money requests from other users.

Each request shows the requester's name and amount.

Users can either **Accept** or **Reject** the request.

3. **Sent Requests**

This section tracks the requests sent by the user to others.

It shows whether the request is pending, accepted, or rejected.

If accepted, the amount is credited to the user’s account.

This system ensures smooth and transparent money requests and approvals.

# Wallet Management

The Wallet feature allows users to securely manage their account balance and update personal details.

1. **Viewing Balance**

Users can see their current balance, but it is hidden (displayed as dots) by default for privacy.

To view the actual balance, users must click on the balance section and enter their **PIN** for authentication.

Once verified, the balance is displayed temporarily for security purposes.

2. **Updating Phone Number**

Users can update their registered phone number by:

1. Entering the new phone number in the designated field.

2. Clicking the **"Update"** button to confirm the change.

This ensures that the user's contact details are kept up-to-date for seamless transactions and notifications.

This feature enhances both security and usability by protecting sensitive financial information while allowing necessary updates.

# Transaction Management

The Transaction Management feature allows users to track their recent financial activities in a structured and detailed manner.

**1.** **Recent Transactions**

Users can view a list of their latest transactions directly from the home screen.

Each transaction entry includes:

1. Name/ID of the sender or receiver

1. Amount transferred

1. Date & Time of the transaction

A symbol indicating whether the transaction was sent (debit) or received (credit)

**2.** **Transaction Details**

Each transaction entry provides a quick summary, helping users keep track of their spending and received funds.

Users can identify the type of transaction through the sent or received symbol, ensuring easy readability.

This feature provides a clear and organized history of transactions, making it easier for users to manage their finances effectively.

# Integration with other services

## ****Authentication Integration (Clerk)****

* **Clerk Authentication** allows users to sign in using email, phone number, or OAuth providers Google, GitHub.
* Supports **multi-factor authentication (MFA)** for added security.
* Users can manage their authentication settings in their profile section.

1. **Sending Emails (Resend)**

* Email is sent to admin email whenever a transaction is made.

1. **Database (Neon)**

* Neon is used for cloud **PostgreSQL** database

# User Profile & Settings

This section explains how users can manage their profile and settings in the **Digital Wallet Management System**.

1. **Creating Profile:**

You can Create a profile using Email and Password or you can use OAuth applications Google

and Github to create a profile.

1. **Accessing Profile:**

Once logged in users can access and modify their profile from top rightmost icon. From there

they can manage their profile.

### ****Changing Password:****

**For password-based login users:**

1. Navigate to **Security Settings**.
2. Click on **Change Password**.
3. Enter your current password and a new password.
4. Click **Update Password**.

**For OAuth users (Google, GitHub, etc.):**

* Password changes must be done via the respective OAuth provider.

### ****Managing Linked Accounts (OAuth Providers)****

Users who sign up via **Google, GitHub, or other OAuth providers** can manage linked accounts under **Connected Accounts** in settings.

* To link a new provider: Click **Add Account**.
* To remove an existing provider: Click **Remove** (a fallback authentication method must be available)

### ****Logging Out****

* Users can log out from their current session via the **Logout** button in the profile menu.

### ****Deleting Account****

If users wish to delete their account permanently:

1. Go to **Manage account** → **Security** → **Delete Account**.
2. Confirm deletion by entering your password.
3. Click **Delete** (This action is irreversible).

# 11 Trouble Shooting

This section provides solutions to common issues encountered while using the **Digital**

**Wallet Management System**.

#### ****1. Unable to Log In****

**Possible Causes:**

* Incorrect username or password
* Account locked due to multiple failed login attempts
* Poor internet connection

**Solution:**

* Ensure the correct credentials are entered
* Reset your password using the “Forgot Password” option
* Check your internet connection
* Contact support if issues doesn’t get solved further

#### ****2. Failed Transactions****

**Possible Causes:**

* Insufficient balance
* Network or server issues

**Solution:**

* Check wallet balance before making a transaction
* Retry after a few minutes in case of network issues

#### ****3. Wallet Balance Not Updating****

**Possible Causes:**

* Delay in processing transactions
* Synchronization issues

**Solution:**

* Refresh the app or website
* Check the transaction history for updates
* Contact customer support if the issue persists

#### ****4. App/Website Not Loading or Crashing****

**Possible Causes:**

* Poor internet connection
* Outdated browser version
* Temporary server issues

**Solution:**

* Check your internet connection
* Update the browser to the latest version
* Clear cache and try again
* If the issue persists, contact support

# 12 Contact & Support

**Website:**  <https://digital-wallet-management-system.vercel.app>

**For Admin :**

**Website:**  <https://digital-wallet-management-system.vercel.app/admin>

### ****Customer Support Details****

* **Support Channels:**
  + **Email Support:** shivakumargulapala2005@gmail.com
  + **Phone Support:** +91 9491666799