Vendor Payment & Bank Statement Manager

Excel Add-in Developed Using Node.js, Yo Office & Office.js

Introduction

- The Vendor Payment & Bank Statement Manager is an Excel Add-in that automates vendor payment recording, manages real-time account balances, and generates reports directly in Excel.

  Built using Node.js for runtime, Yo Office for automated setup, and Office.js for seamless Excel integration.
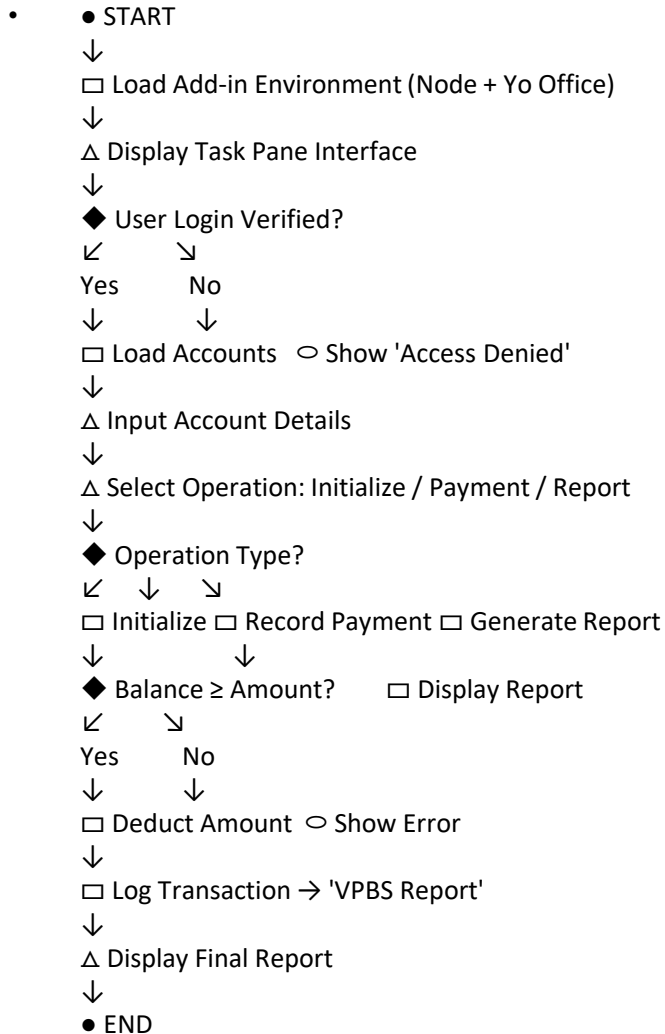
Development Environment

- 1. Node.js – Provides runtime and npm for package management.
  2. Yo Office – Automatically creates the complete Excel Add-in structure.
  3. Office.js – Connects the Add-in interface with Excel workbooks.
  4. Excel.run – Executes Excel operations within a safe context for accuracy.

Project Structure (Generated by Yo Office)

- Vendor-Payment-Manager/
  ├── manifest.xml – Defines Add-in setup for Excel.
  ├── package.json – Dependencies and scripts.
  ├── server.js – Local HTTPS server.
  ├── webpack.config.js – Build and bundle configuration.
  └── src/
    ├── taskpane/ (taskpane.html, taskpane.js, taskpane.css)
    └── commands/ (commands.js)

Functional Flow Diagram

- ● START
  ↓
  □ Load Add-in Environment (Node + Yo Office)
  ↓
  △ Display Task Pane Interface
  ↓
  ◆ User Login Verified?
  ↙   ↘
  Yes   No
  ↓   ↓
  □ Load Accounts   ○ Show 'Access Denied'
  ↓
  △ Input Account Details
  ↓
  △ Select Operation: Initialize / Payment / Report
  ↓
  ◆ Operation Type?
  ↙   ↓   ↘
  □ Initialize □ Record Payment □ Generate Report
  ↓   ↓
  ◆ Balance ≥ Amount?   □ Display Report
  ↙   ↘
  Yes   No
  ↓   ↓
  □ Deduct Amount ○ Show Error
  ↓
  □ Log Transaction → 'VPBS Report'
  ↓
  △ Display Final Report
  ↓
  ● END

Workflow Summary

- 1. Initialization – Node.js loads Add-in in Excel.
  2. Authentication – User login ensures security.
  3. Account Setup – Displays account balances.
  4. Record Payment – User selects vendor and amount.
  5. Validation – Checks balance before deduction.
  6. Logging – Saves transaction to 'VPBS Report'.
  7. Report – Generates a complete summary.

Key Features

- ☑ Built automatically using Yo Office.
  ☑ Integrated through Office.js for live Excel control.
  ☑ Uses Excel.run for safe and accurate updates.
  ☑ Tracks multiple accounts and vendor payments.
  ☑ Instant Excel-native reporting and summaries.

Outcome

- The Vendor Payment & Bank Statement Manager streamlines financial operations inside Excel, offering a fully automated, error-free, and efficient workflow for vendor payment management.

  Result: Accurate • Efficient • Professional • Excel-Integrated.