Findroids Excel Add-In Documentation

Project Overview

Findroids Excel Add-In is a powerful Microsoft Office Add-In that enhances Excel functionality by providing advanced data manipulation and analysis capabilities. The add-in is designed to help users efficiently work with financial data and perform complex operations within Excel.

Technical Stack

Core Technologies

- **TypeScript** - Primary programming language
- **React** - Frontend framework (v18.2.0)
- **Office.js** - Microsoft Office Add-in API
- **Webpack** - Module bundler and development server

UI Frameworks and Libraries

- **Fluent UI React** (@fluentui/react-components v9.46.4) - Microsoft's design system
- **Material-UI** (@mui/material v5.15.10) - Additional UI components
- **Emotion** - CSS-in-JS styling solution
    - @emotion/react v11.11.3
    - @emotion/styled v11.11.0

State Management

- **Zustand** (v5.0.3) - Lightweight state management solution

Development Tools

- **Babel** - JavaScript/TypeScript compiler
    - @babel/core v7.24.0
    - @babel/preset-env v7.26.9
    - @babel/preset-typescript v7.23.3
- **ESLint** - Code linting with Office Add-ins specific rules
- **Prettier** - Code formatting
- **TypeScript** (v5.4.2) - Type checking and compilation

Development Environment

- **webpack-dev-server** - Development server with hot reloading
- **Office Add-in DevTools**
    - office-addin-debugging
    - office-addin-dev-certs
    - office-addin-manifest
    - office-addin-lint

Backend Documentation

Backend Technical Stack

Core Technologies

- **Node.js** (v18.x) - Runtime environment
- **Express.js** (v4.18.x) - Web application framework
- **TypeScript** (v5.4.x) - Type-safe development

Database & Backend-as-a-Service

- **Supabase** - Open source Firebase alternative
  - PostgreSQL database with real-time capabilities
  - Built-in authentication and user management
  - Row Level Security (RLS) for data protection
  - Real-time subscriptions
  - Auto-generated APIs
  - Database backups and point-in-time recovery
  - Storage for files and media
  - Edge Functions for serverless computing

Authentication & Security

- **JSON Web Tokens (JWT)** - For secure authentication
- **bcrypt** - Password hashing
- **helmet** - HTTP security headers
- **cors** - Cross-Origin Resource Sharing

Testing & Quality Assurance

- **Jest** - Unit and integration testing
- **Supertest** - API endpoint testing
- **ESLint** - Code quality and style enforcement
- **Prettier** - Code formatting

Development Tools

- **nodemon** - Development server with hot reload
- **ts-node** - TypeScript execution environment
- **dotenv** - Environment variable management
- **winston** - Logging framework

API Documentation

- **Swagger/OpenAPI** - API documentation
- **JSDoc** - Code documentation

Deployment & DevOps

- **Docker** - Containerization
- **PM2** - Process management
- **GitHub Actions** - CI/CD pipeline
- **Azure App Service** - Cloud hosting platform

System Requirements

- Node.js 18.x or higher
- Supabase PostgreSQL database
- NPM or Yarn package manager
- Docker (optional, for containerization)

Development Setup

1. Install dependencies:

   ```
   npm install
   ```

2. Configure environment variables:

   ```
   cp .env.example .env
   ```

3. Start Supabase service
4. Run development server:

   ```
   npm run dev
   ```

Build and Deployment

- Development build:

  ```
  npm run build:dev
  ```

- Production build:

  ```
  npm run build
  ```

- Docker build:

```
docker build -t findroids-api .
```

Project Structure

```
├── assets/             # Static assets
├── src/               # Source code
├── .vscode/           # VS Code configuration
├── manifest.xml       # Add-in manifest
├── webpack.config.js  # Webpack configuration
├── package.json       # Project dependencies
├── tsconfig.json     # TypeScript configuration
└── babel.config.json # Babel configuration
```

Development Setup

Prerequisites

- Node.js (Latest LTS version recommended)
- Microsoft Excel (Desktop or Online)
- Visual Studio Code (recommended)

Installation

1. Clone the repository
2. Install dependencies:

   ```
   npm install
   ```

3. Start the development server:

   ```
   npm start
   ```

Available Scripts

- `npm run build` - Production build
- `npm run build:dev` - Development build
- `npm start` - Start development server
- `npm run lint` - Run linting checks
- `npm run lint:fix` - Fix linting issues
- `npm run validate` - Validate the manifest file

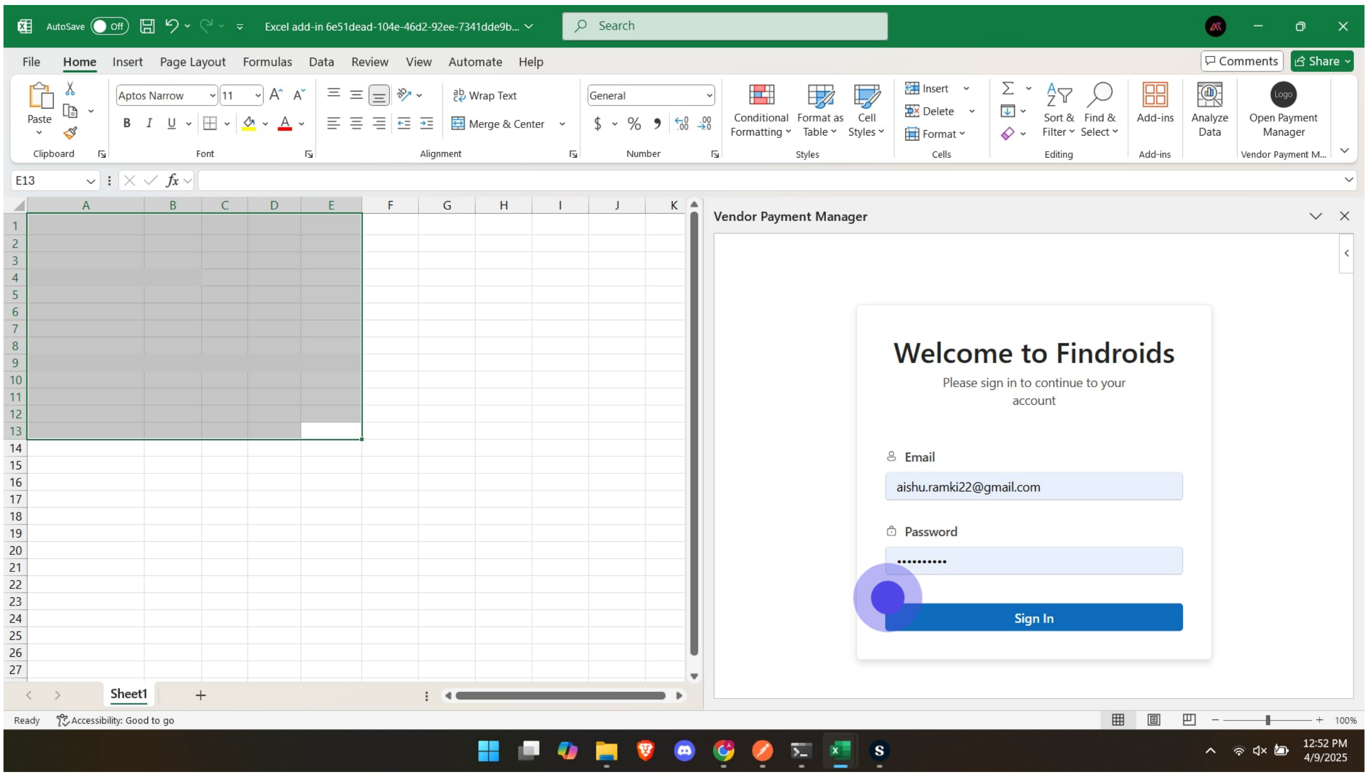
Browser Support

The add-in supports:

- Latest 2 versions of modern browsers
- Internet Explorer 11

User Interface and Features

1. Authentication Screen



The initial screen users encounter is the authentication interface, which includes:

Components:

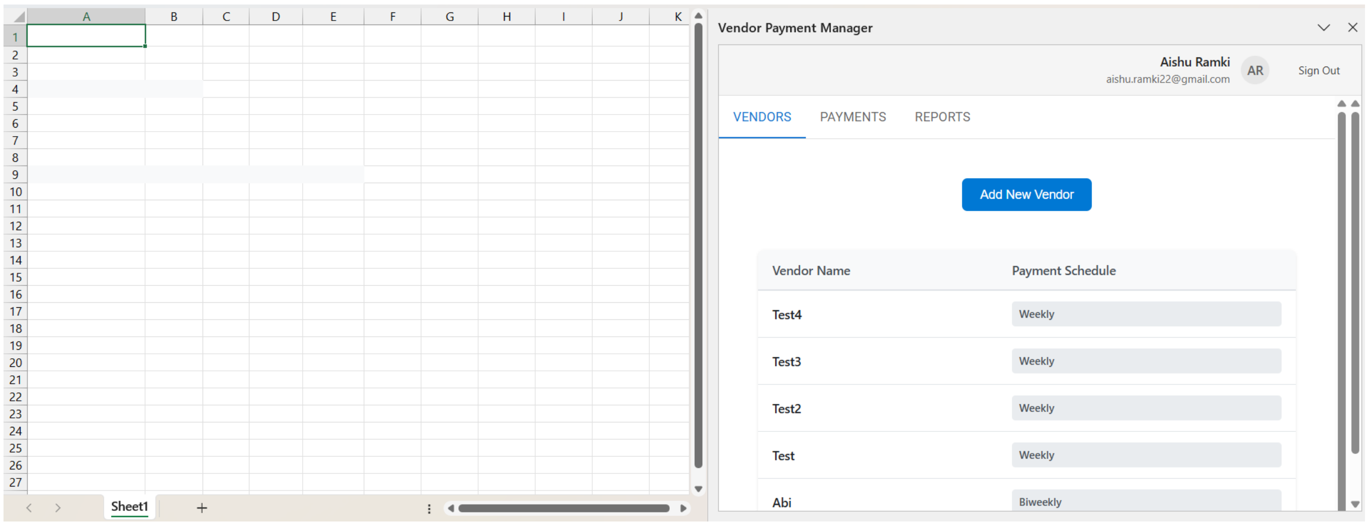
- **Welcome Header**: Displays "Welcome to Findroids"
- **Sign-in Form**:
  - Email input field
  - Password input field (secured)
  - Sign In button with modern design
- **User Experience**:
  - Clean, minimalist design
  - Responsive layout
  - Clear input validation
  - Professional color scheme matching Microsoft Office theme

Security Features:

- Secure password field with masked input
- Email validation
- Protected authentication flow

The login screen ensures secure access to the Findroids functionality while maintaining a professional and user-friendly interface consistent with Microsoft Office design principles.

2. Main Dashboard



Vendor Name	Payment Schedule
Test4	Weekly
Test3	Weekly
Test2	Weekly
Test	Weekly
Abi	Biweekly

The main dashboard provides a comprehensive interface for managing vendor payments with the following features:

Header Components:

- **User Profile Section**:
  - Displays user name and email
  - User initials avatar (AR)
  - Sign Out button
- **Navigation Tabs**:
  - VENDORS (default active tab)
  - PAYMENTS
  - REPORTS

3. Vendor Management

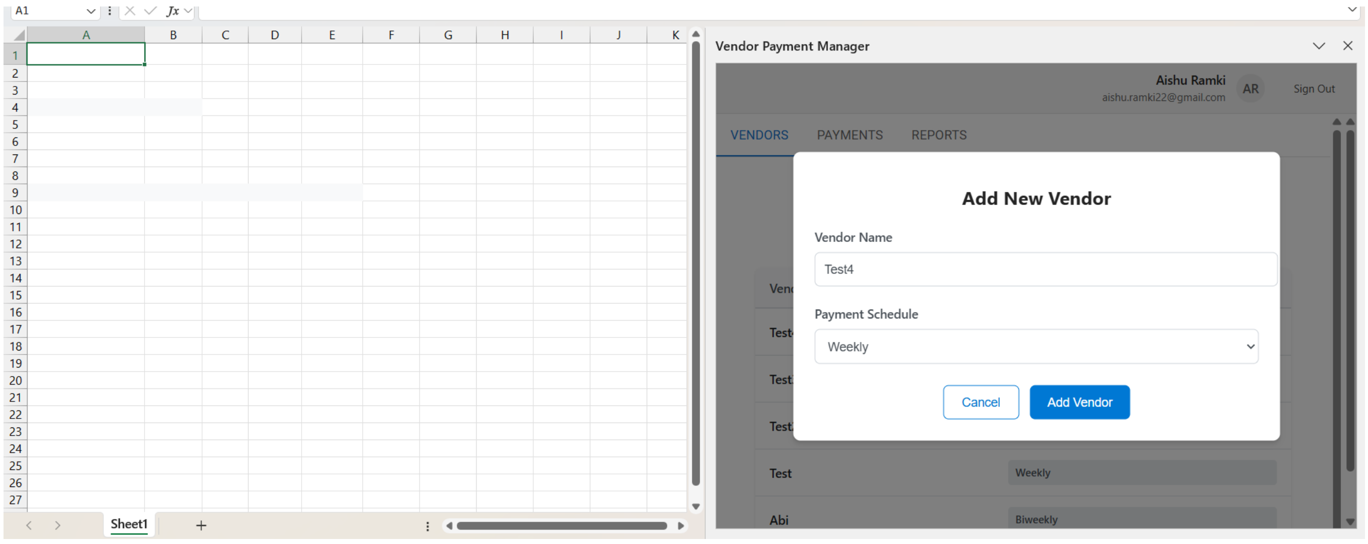
The Vendors tab provides a complete vendor management system:

Vendor List View:

- **Column Headers**:
  - Vendor Name
  - Payment Schedule
- **List Features**:
  - Sortable columns
  - Clear visibility of payment schedules
  - Easy-to-scan layout
- **Payment Schedule Options**:
  - Weekly
  - Biweekly

- (Other customizable options)

Add New Vendor



Add New Vendor

Vendor Name: Test4

Payment Schedule: Weekly

Test	Weekly
Abi	Biweekly

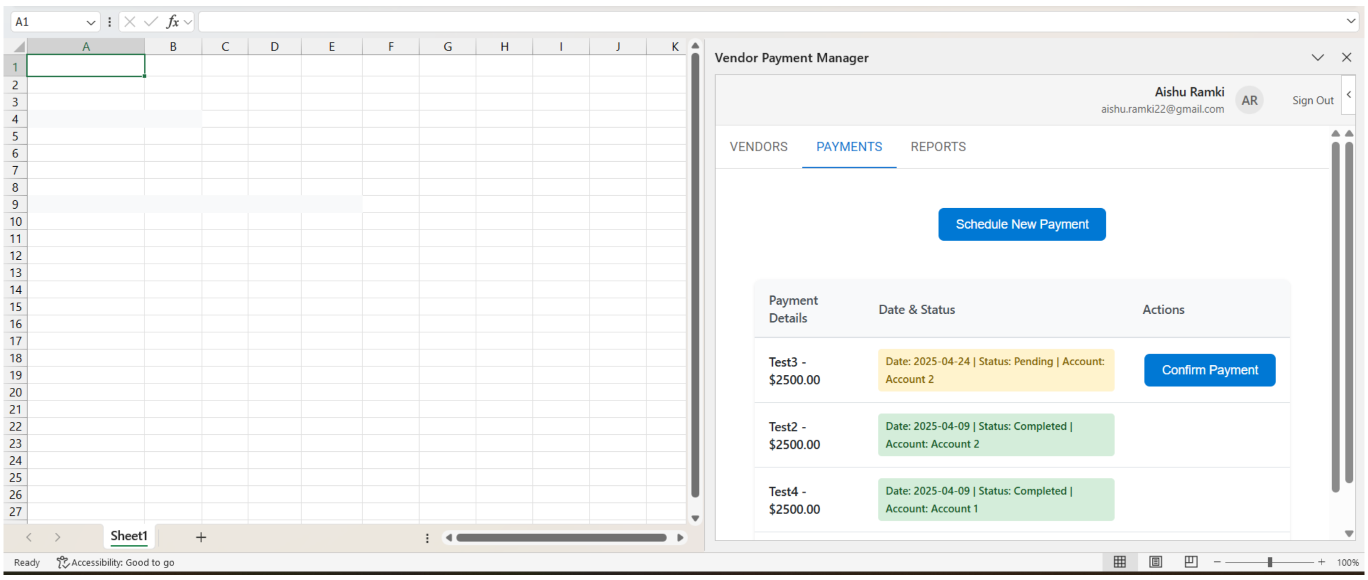
The "Add New Vendor" functionality includes:

- **Action Button**:
  - Prominent "Add New Vendor" button
  - Positioned for easy access
- **Modal Dialog**:
  - Clean, focused interface
  - Form Fields:
    - Vendor Name (text input)
    - Payment Schedule (dropdown)
      - Weekly
      - Biweekly
      - (Other options)
  - Action Buttons:
    - "Add Vendor" (primary action)
    - "Cancel" (secondary action)

User Experience Features:

- Responsive and fluid interface
- Clear visual hierarchy
- Consistent Microsoft Office design language
- Easy navigation between different sections
- Intuitive vendor management workflows

4. Payment Management



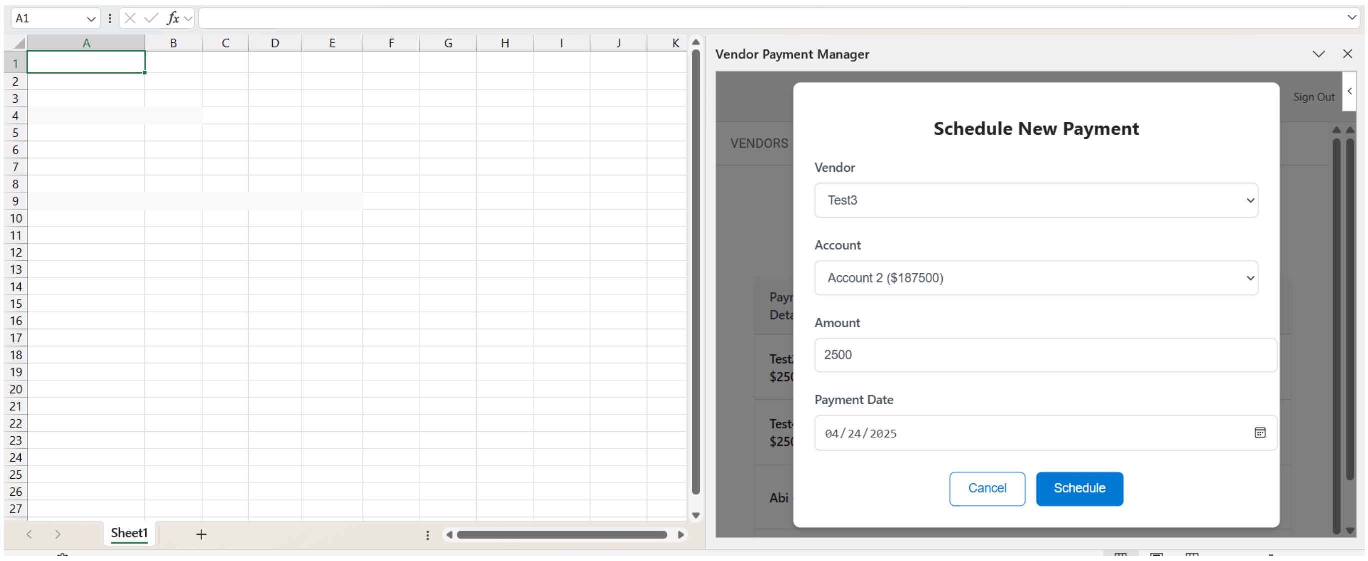
Payment Details	Date & Status	Actions
Test3 - $2500.00	Date: 2025-04-24 | Status: Pending | Account: Account 2	Confirm Payment
Test2 - $2500.00	Date: 2025-04-09 | Status: Completed | Account: Account 2	
Test4 - $2500.00	Date: 2025-04-09 | Status: Completed | Account: Account 1	

The Payments tab provides a comprehensive payment management system with the following features:

Payment List View:

- **Column Headers**:
  - Payment Details (Vendor name and amount)
  - Date & Status
  - Actions
- **Payment Information Display**:
  - Vendor name with payment amount (e.g., "Test3 - $2500.00")
  - Date, Status, and Account information
  - Color-coded status indicators:
    - Yellow background for Pending payments
    - Green background for Completed payments

Schedule New Payment



Schedule New Payment

Vendor: Test3

Account: Account 2 ($187500)

Amount: 2500

Payment Date: 04/24/2025

The "Schedule New Payment" functionality includes:

- **Action Button**:
  - Prominent "Schedule New Payment" button
  - Positioned at the top of the payments list
- **Modal Dialog**:
  - Form Fields:
    - Vendor (dropdown selection)
    - Account (dropdown with balance display)
    - Amount (numeric input)
    - Payment Date (date picker)
  - Action Buttons:
    - "Schedule" (primary action)
    - "Cancel" (secondary action)

Payment Actions

- **Confirm Payment**:
  - Available for pending payments
  - Clear action button for each pending payment
  - Updates payment status upon confirmation

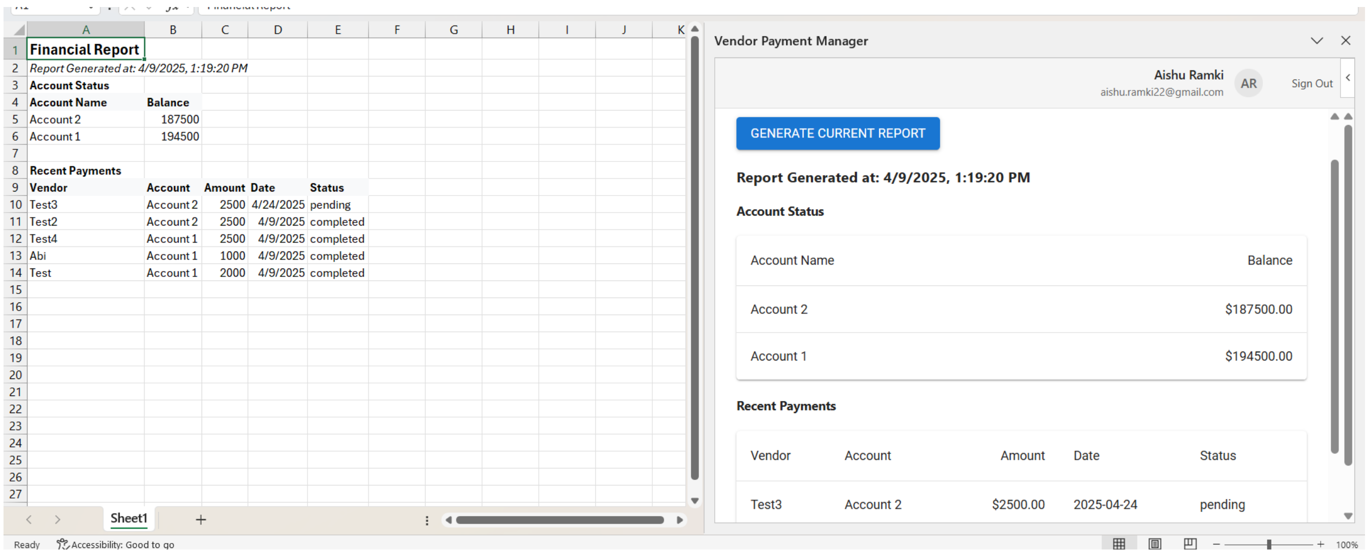
Payment Status Features:

- **Status Types**:
  - Pending: Awaiting confirmation
  - Completed: Successfully processed
- **Status Information**:
  - Payment date
  - Current status
  - Associated account
- **Visual Indicators**:
  - Distinct styling for different payment states
  - Clear action buttons based on payment status

User Experience Features:

- Intuitive payment scheduling workflow
- Clear payment status visualization
- Easy-to-use date selection
- Account balance visibility
- Streamlined payment confirmation process
- Responsive and accessible interface

5. Financial Reports



Financial Report

Report Generated at: 4/9/2025, 1:19:20 PM

Account Status

Account Name	Balance
Account 2	187500
Account 1	194500

Recent Payments

Vendor	Account	Amount	Date	Status
Test3	Account 2	2500	4/24/2025	pending
Test2	Account 2	2500	4/9/2025	completed
Test4	Account 1	2500	4/9/2025	completed
Abi	Account 1	1000	4/9/2025	completed
Test	Account 1	2000	4/9/2025	completed

Report Generated at: 4/9/2025, 1:19:20 PM

Account Status

Account Name	Balance
Account 2	$187500.00
Account 1	$194500.00

Recent Payments

Vendor	Account	Amount	Date	Status
Test3	Account 2	$2500.00	2025-04-24	pending

The Reports tab provides comprehensive financial reporting capabilities with dual-view functionality (Task Pane and Excel Sheet).

Report Generation

- **Action Button**:
  - "GENERATE CURRENT REPORT" button
  - Generates real-time financial data
  - Timestamp indication of report generation

Report Components

Account Status Section:

- **Account Overview Table**:
  - Account Name column
  - Balance column with currency formatting
  - Clear presentation of multiple accounts
  - Current balance for each account

Recent Payments Section:

- **Detailed Payment History Table**:
  - Columns:
    - Vendor
    - Account
    - Amount
    - Date
    - Status
  - Comprehensive view of all transactions
  - Status indicators for payment states

Dual-View Functionality

Task Pane View:

- Clean, organized layout
- Real-time data display
- Easy-to-read formatting
- Scrollable interface for viewing all data

Excel Sheet Generation:

- **Automated Sheet Creation**:
  - Creates "Financial Report" worksheet
  - Formatted tables and headers
  - Professional spreadsheet layout
- **Data Organization**:
  - Account status section with balances
  - Recent payments table with complete transaction history
  - Timestamp of report generation
  - Consistent formatting with currency values

User Experience Features:

- One-click report generation
- Synchronized data between task pane and Excel
- Professional financial formatting
- Clear timestamp for report tracking
- Easy-to-read tabular format
- Instant access to financial overview
- Exportable Excel format for further analysis