📘 Cookbook for Implementing FinEase AI in Uptiq

✅ Phase 1: Agent Creation Using Quick Create Feature

1.1 Objective

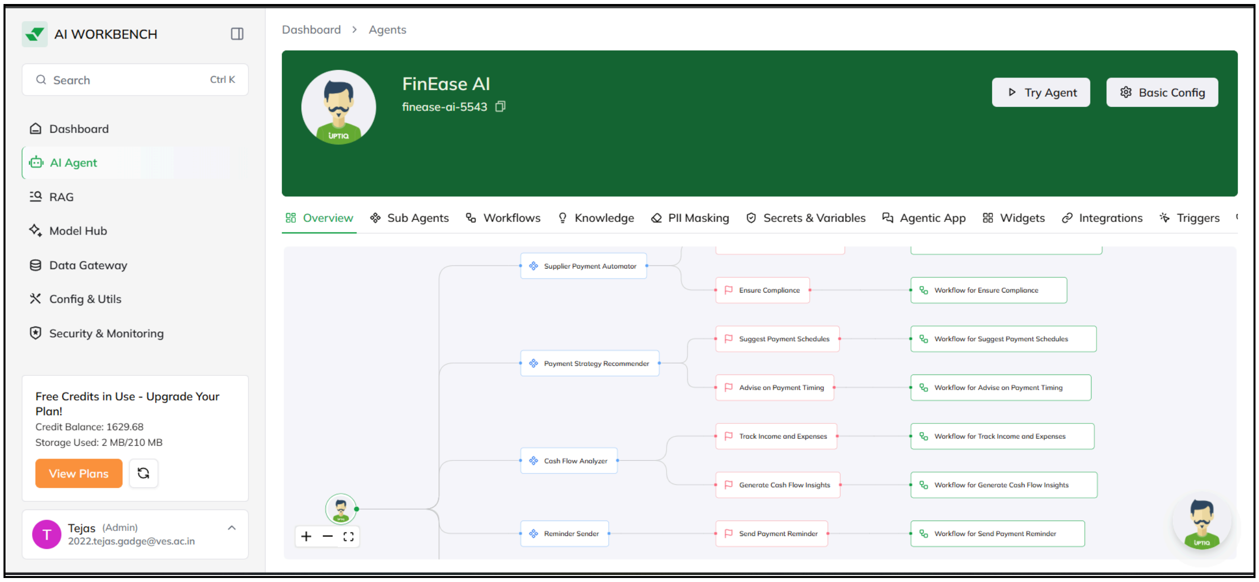
To create the main agent **FinEase AI** with multiple sub agents using Uptiq's *Quick Create* feature, streamlining financial workflows for small businesses.

1.2 Steps

1. **Login to Uptiq:**
   - Go to Uptiq AI Workbench and log in.
   - Navigate to the **Agent Studio**.

2. **Quick Create Agent:**
   - Select **Quick Create**.
   - Enter the agent name: FinEase AI.
   - Provide a brief description:
     "AI-powered financial assistant that automates financial workflows for small businesses, including invoice management, overdue detection, cash flow analysis, and supplier payments."
   - Choose **GPT-4** as the model for financial insights.

3. **Finalize and Create:**
   - Click **Create Agent**.
   - The main **FinEase AI** agent is now ready.



✅ Phase 2: Subagent Creation

2.1 Objective

Create six specialized subagents, each responsible for a specific financial task, enhancing FinEase's capabilities.

2.2 Prompt Used

Create an AI-powered financial assistant named *FinEase* that automates financial workflows for small businesses. The agent should have the following subagents, each handling a specific financial task:

🔹 **Main Agent: FinEase AI**

Manages end-to-end financial automation, including invoice tracking, overdue detection, cash flow analysis, and supplier payments.

🔹 **Subagents & Responsibilities:**

1️⃣ **Invoice Manager**

- Generates invoices for transactions.
- Stores invoice details for tracking.

2️⃣ **Overdue Payment Detector**

- Monitors invoice due dates.
- Identifies overdue payments.

- Flags overdue invoices for reminders.

3️⃣ **Reminder Sender**
 - Sends payment reminders via email to a group of users.
 - Uses escalation logic:
 - Gentle Reminder (Before Due Date)
 - Urgent Reminder (On Due Date)
 - Final Notice (After Due Date)

4️⃣ **Cash Flow Analyzer**
- Tracks income and expenses.
- Generates insights on cash flow trends.

5️⃣ **Payment Strategy Recommender**
- Suggests optimal payment schedules based on financial health.
- Advises when to delay or fast-track payments.

6️⃣ **Supplier Payment Automator**
- Processes automated payments to suppliers via Razorpay/PayPal.
- Ensures compliance with financial regulations.

🔹 **AI Agent Functionality**
✅ Uses **GPT-4o** for financial insights.
✅ Integrates with Vector DB*.
✅ Sends reminders via Twilio / Email API.
✅ Executes payments using Razorpay, PayPal, or Stripe.
✅ Built with a flow-based, no-code approach in Uptiq AI Workbench.

2.3 Subagent Configuration

For each subagent:

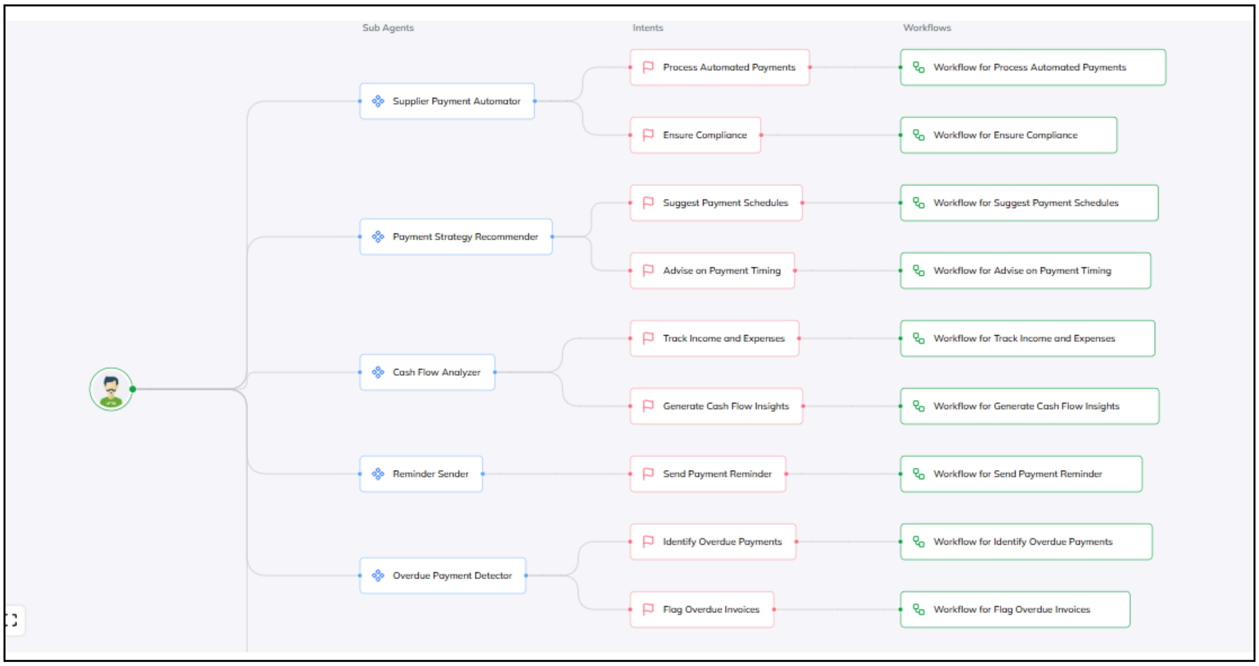
1. **Go to Agent Studio → Create New Subagent**
2. **Subagent Details:**
   - Name: Invoice Manager
   - Description:
     "Generates invoices for transactions and stores invoice details for tracking."
   - **Assign Responsibilities:**
     - Invoice generation.
     - Vector Database.

- Choose GPT-4 as the model.
   - Save the subagent.

3. **Repeat the process** for the remaining five subagents:

   - Overdue Payment Detector
   - Reminder Sender
   - Cash Flow Analyzer
   - Payment Strategy Recommender
   - Supplier Payment Automator

✅ Intent and subagents Flow diagram :



✅ Phase 3: Invoice Generation Implementation

3.1 Objective

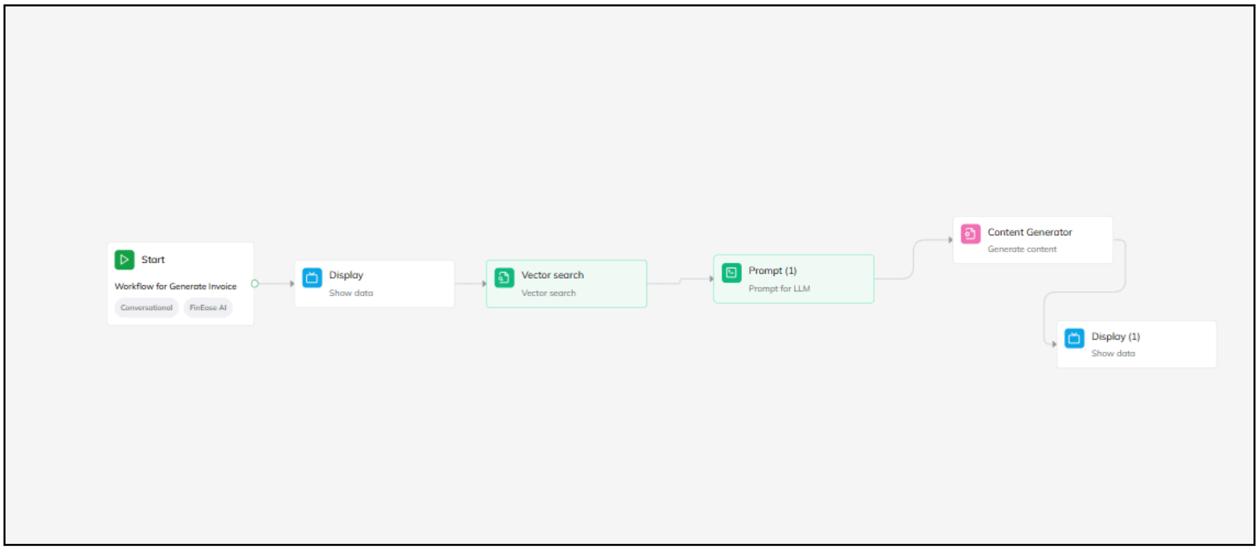
Enable the **Invoice Manager** subagent to generate invoices based on financial transaction data.

3.2 Steps

1. **Data Source Integration:**
   - Connect to **QuickBooks** or **Zoho Books or Vectordb**.
   - Authorize the connection with valid API keys.
   - Ensure read/write access to transaction data.

2. **Invoice Generation Flow:**

- **Trigger**: When a transaction is detected.
- **Action**:
    - Extract transaction details (amount, payer, date).
    - Create an invoice with the following fields:
        - Invoice ID
        - Date of Issue
        - Due Date
        - Payer Information
        - Payment Terms
        - Line Items (Product/Service, Quantity, Price)



3. **Invoice Format**
   Below is format for Invoice generation

Invoice

Client Name: {Client_Name}
Email: {Contact_Email}
Phone: {Contact_Phone}

Transaction Details:

Transaction ID	Amount	Due Date
{Transaction_ID}	{Amount} /-	{Due_Date}

Payment Instructions:

Please clear the payment at the earliest to avoid late fees.

Contact support for any queries.

4. **Testing the Flow:**
    - Create sample transactions in Zoho Books/QuickBooks.
    - Ensure invoices are generated automatically by the **Invoice Manager**.
    - Verify that invoice data is stored correctly.

Downloaded invoice from above as shown in prompt :

Invoice

Client Name: JKL Enterprises
Email: 2022.ganesh.shelar@ves.ac.in
Phone: +915432109876

Transaction Details:

Transaction ID	Amount	Due Date
TRN105	18000 /-	2025-04-01

Payment Instructions:

Please clear the payment at the earliest to avoid late fees.

Contact support for any queries.

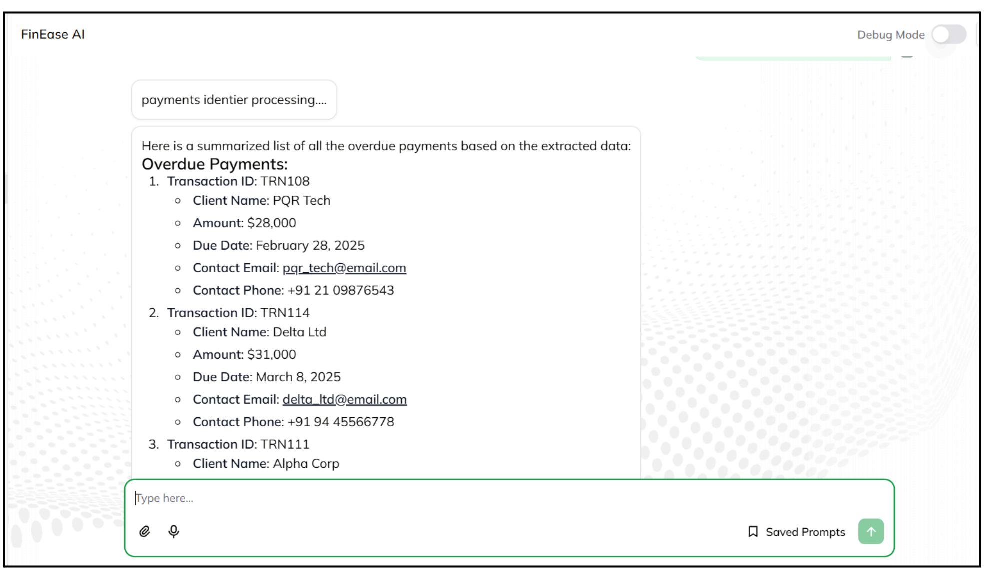
✅ Key Components Used

1. **AI Model:** GPT-4
2. **Financial APIs:**
    - **Zoho Books / QuickBooks** → Data management
    - **Razorpay / PayPal / Stripe** → Payment automation
    - **Twilio / Email API** → Reminder notifications
3. **Flow-Based No-Code Architecture:** Uptiq AI Workbench

Post Feedback

✅Phase 4: Implement overdue detection using the Overdue Payment Detector.

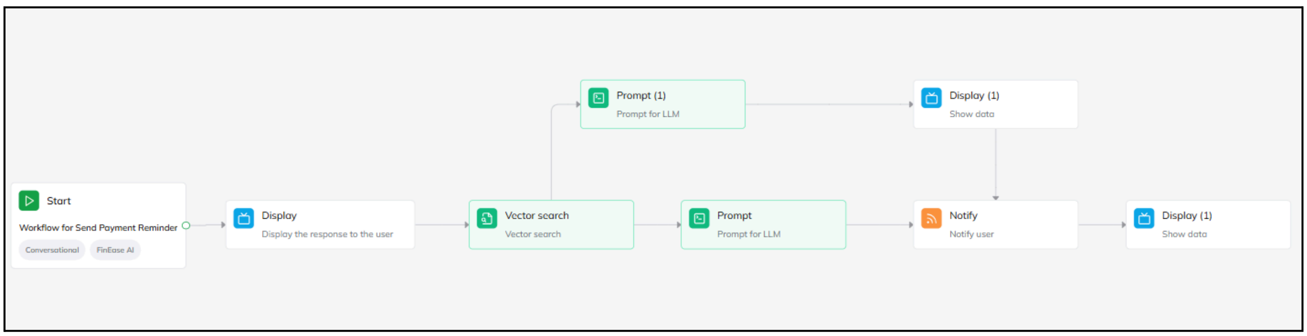
1. **Fetch Data –** Retrieves invoice records from vector db.
2. **Classify & Organize –** AI categorizes invoices by status, detecting overdue and unpaid invoices.
3. **Trigger Actions –** Sends automated reminders and updates for pending or overdue payments by integrating to the reminder node.



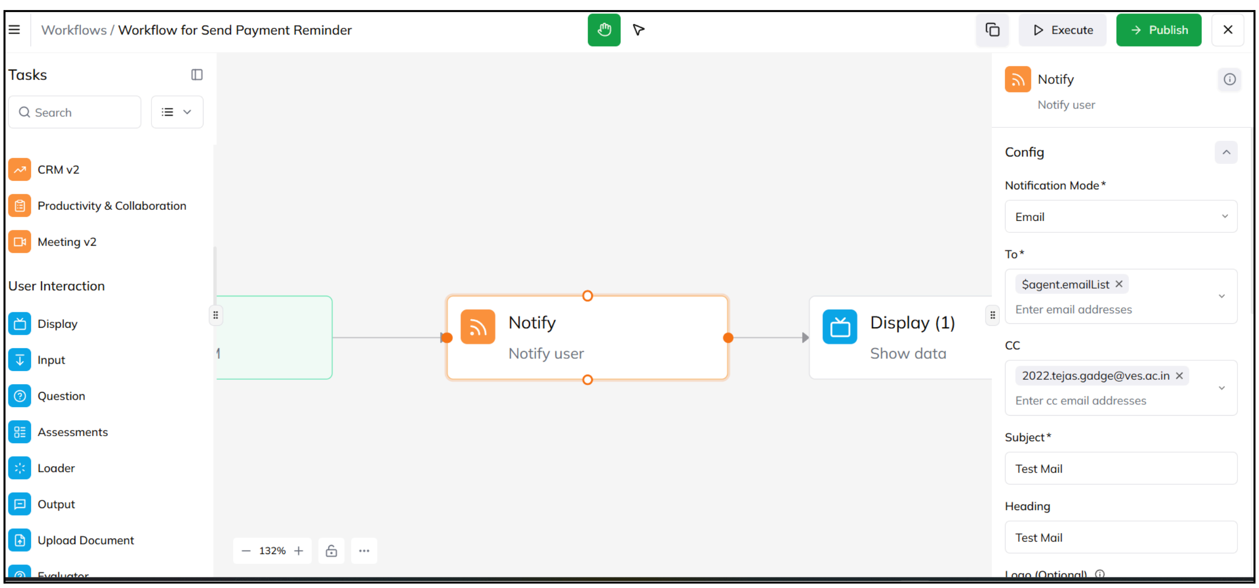
✅Phase 5: Automate reminder notifications with escalation logic using the Reminder Sender.

First we have configured workflow for this :

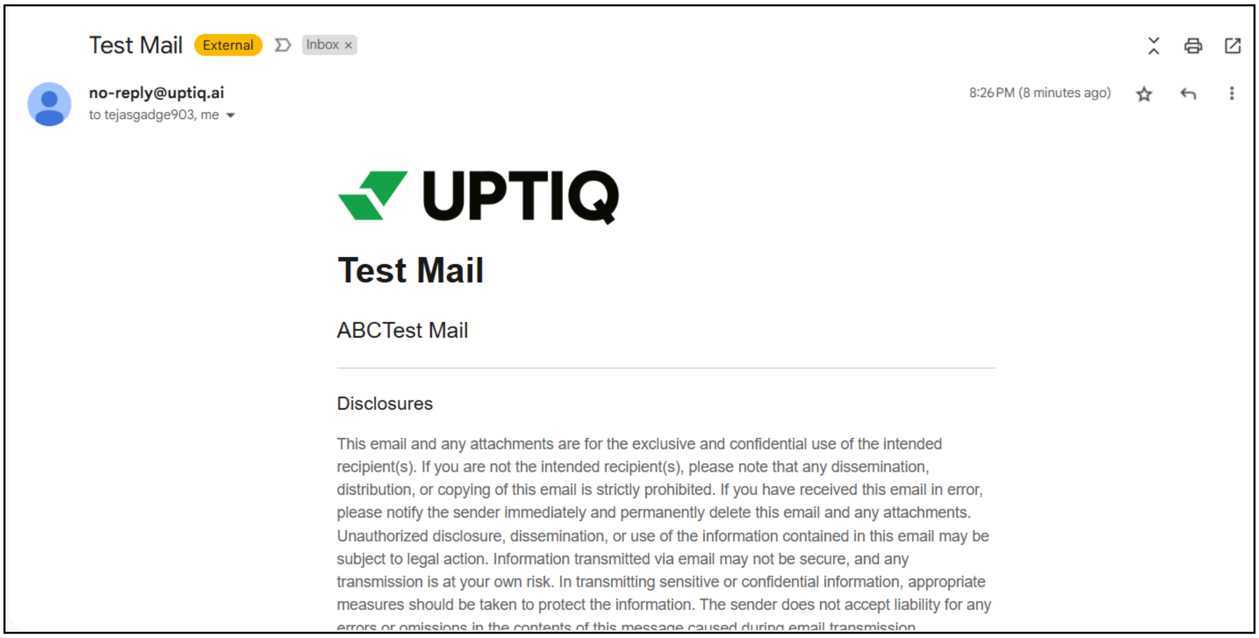
1. ✔ **Invoice Tracking** – Monitors due dates and payment statuses from integrated accounting systems.
2. ✔ **Retrieval:** Users with overdue or pending payments.
3. ✔ **Automated Dispatch** – Sends reminders at predefined intervals until payment is received using *notify Node.*



Then we have set the user who has status of payment as Overdue :



The user has received the mail in inbox :

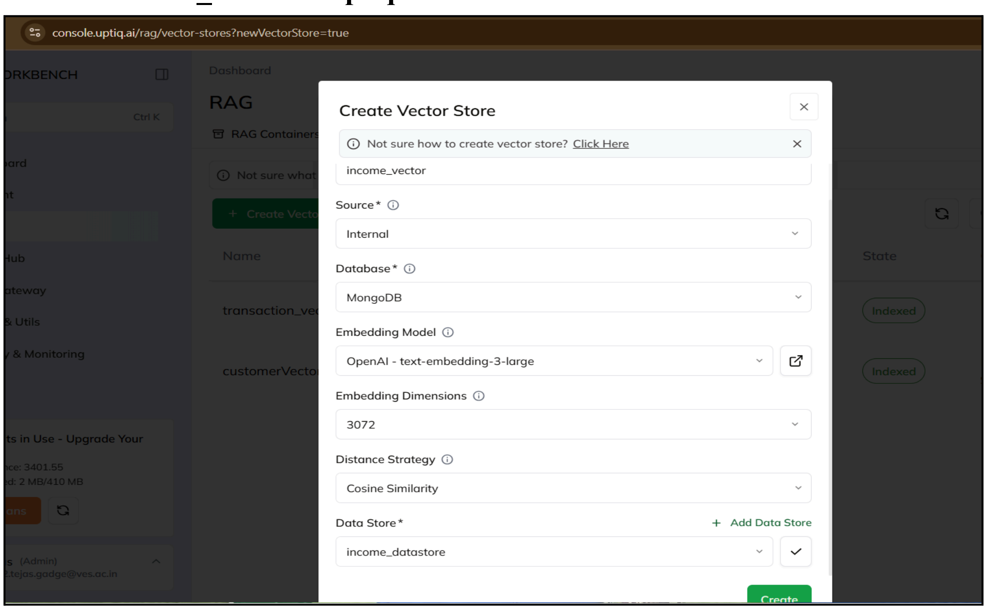


✅Phase 6: Enable cash flow analysis

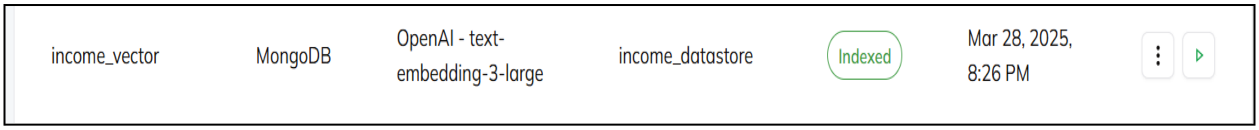
Part I. Total income and customer details who had paid to vendor

Steps :

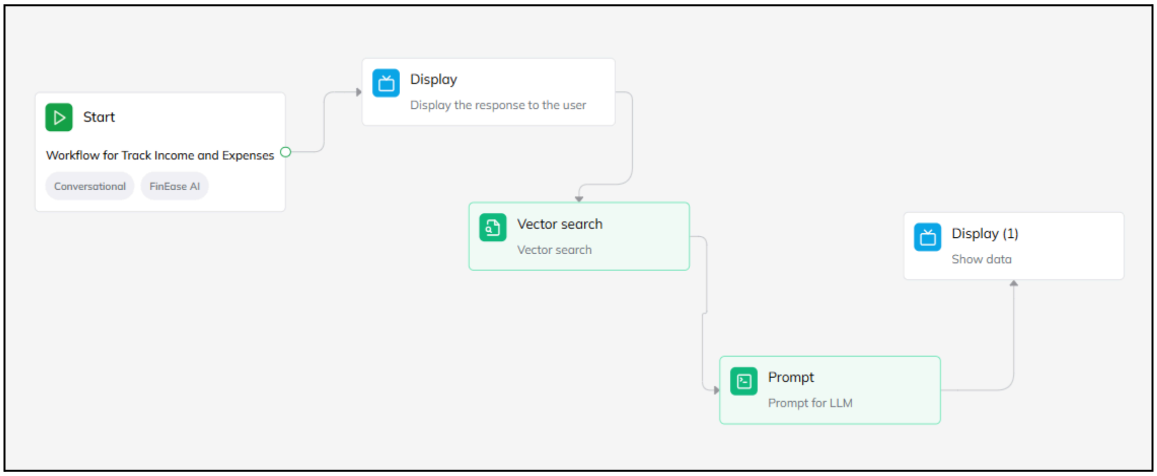
Created income_vector in uptiq:



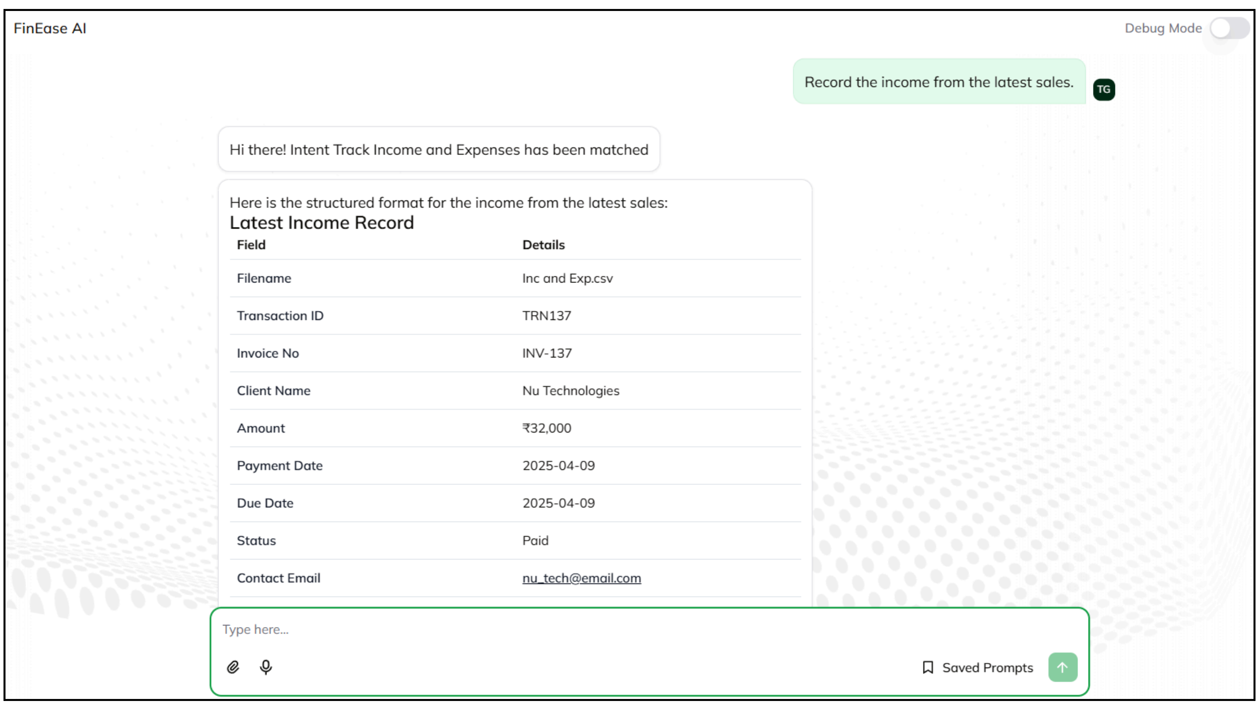
For creating vector store we need data store , so we also had created “ income_store” as datastore and uploaded our dataset in csv format .



Then we have configured workflow :

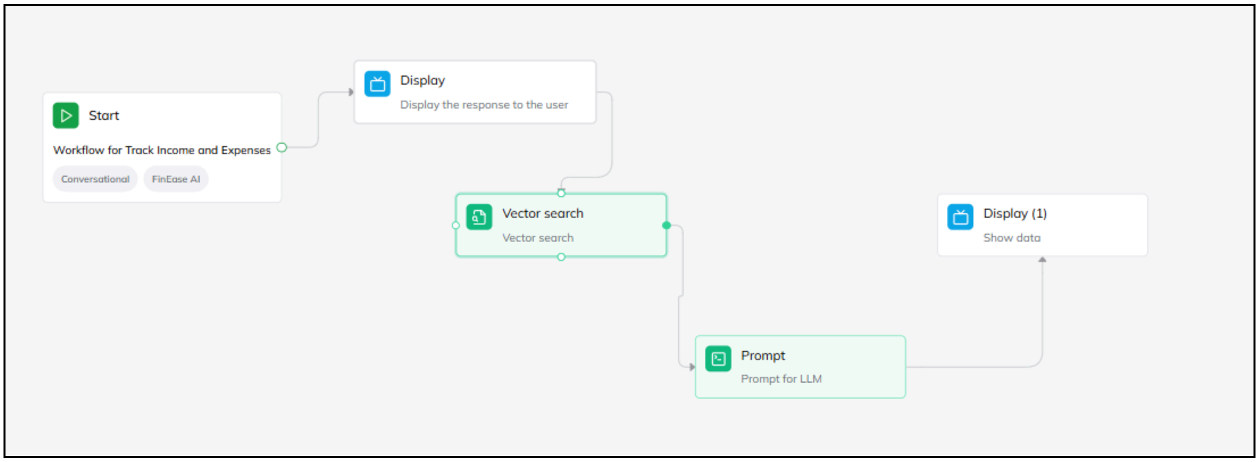


After publishing workflow we have tested it with prompt

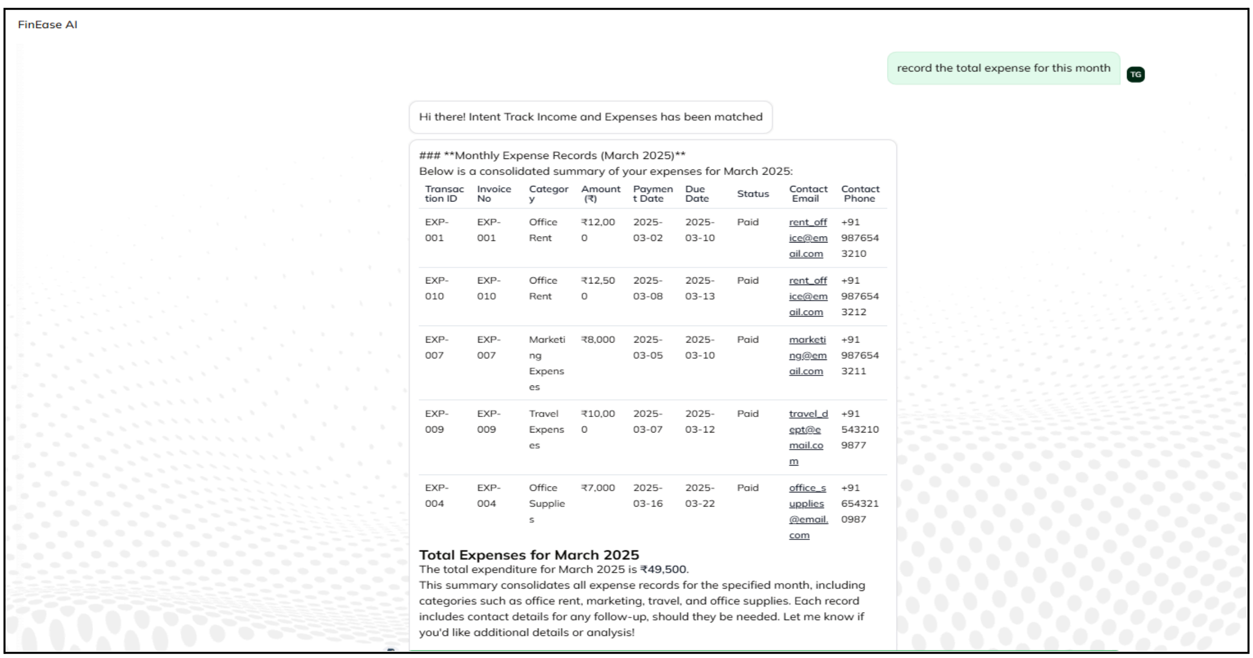


Part II. Total Expense and Warehouse details from which the purchase is made.

Configured the workflow for total expense as below :

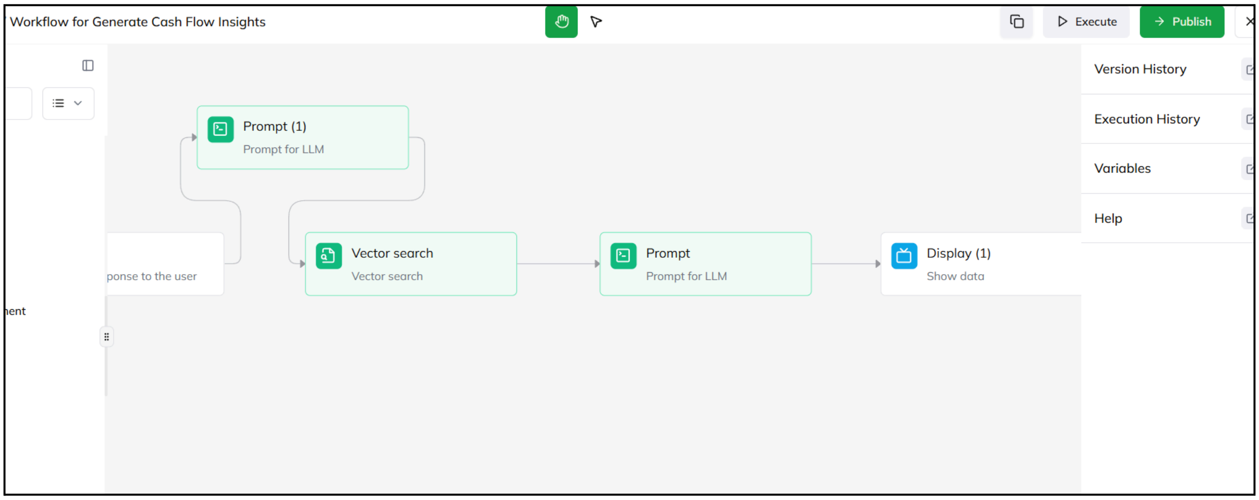


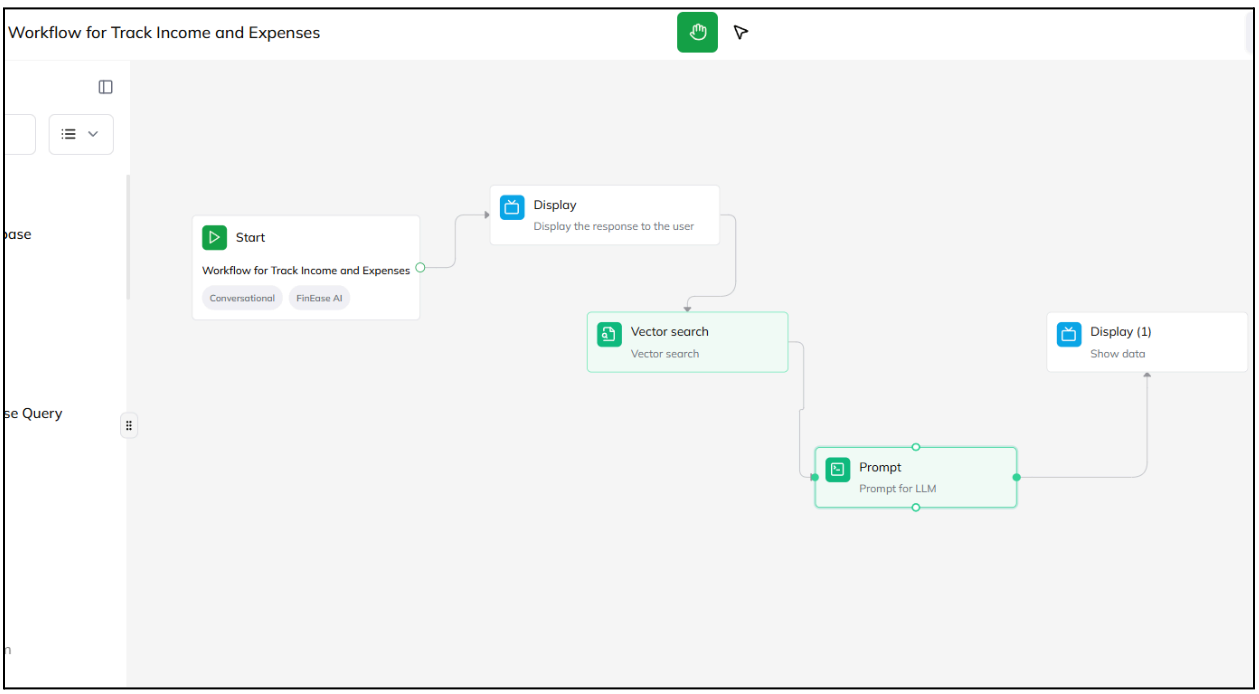
After publishing workflow we have tested it with prompt



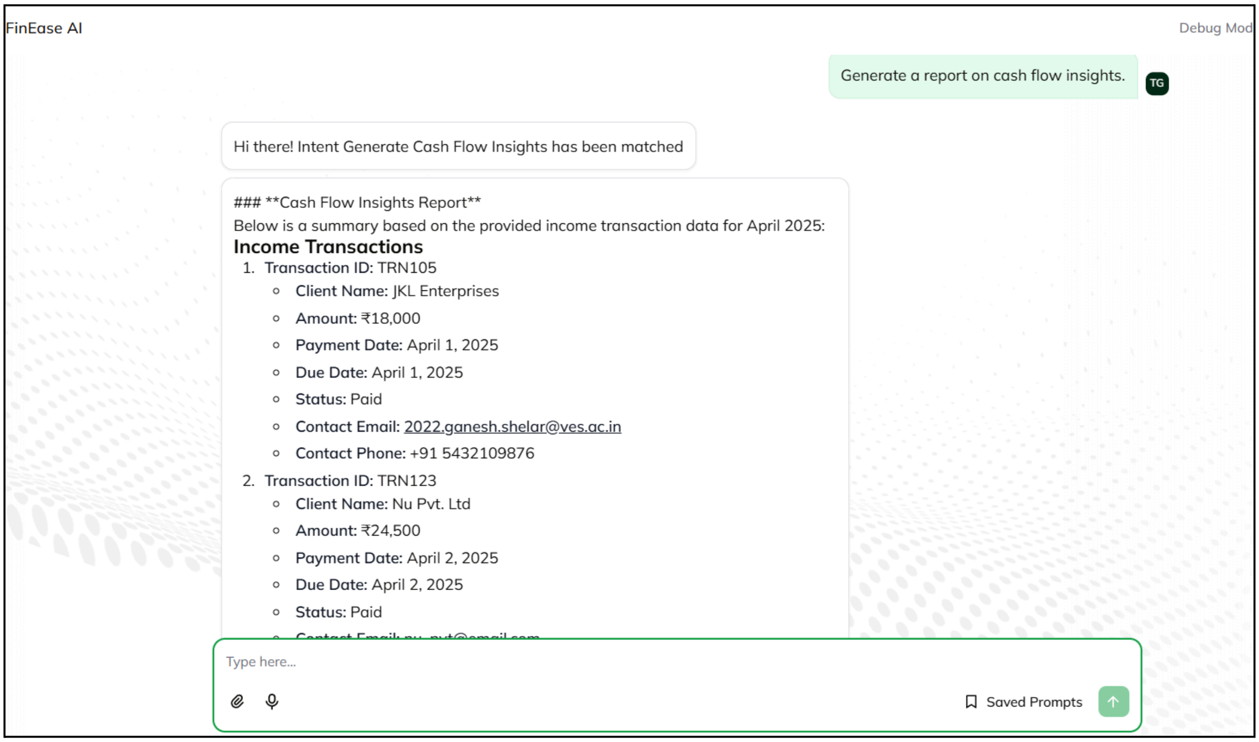
Part III. Cash Flow Insight Part

Configured the workflow:

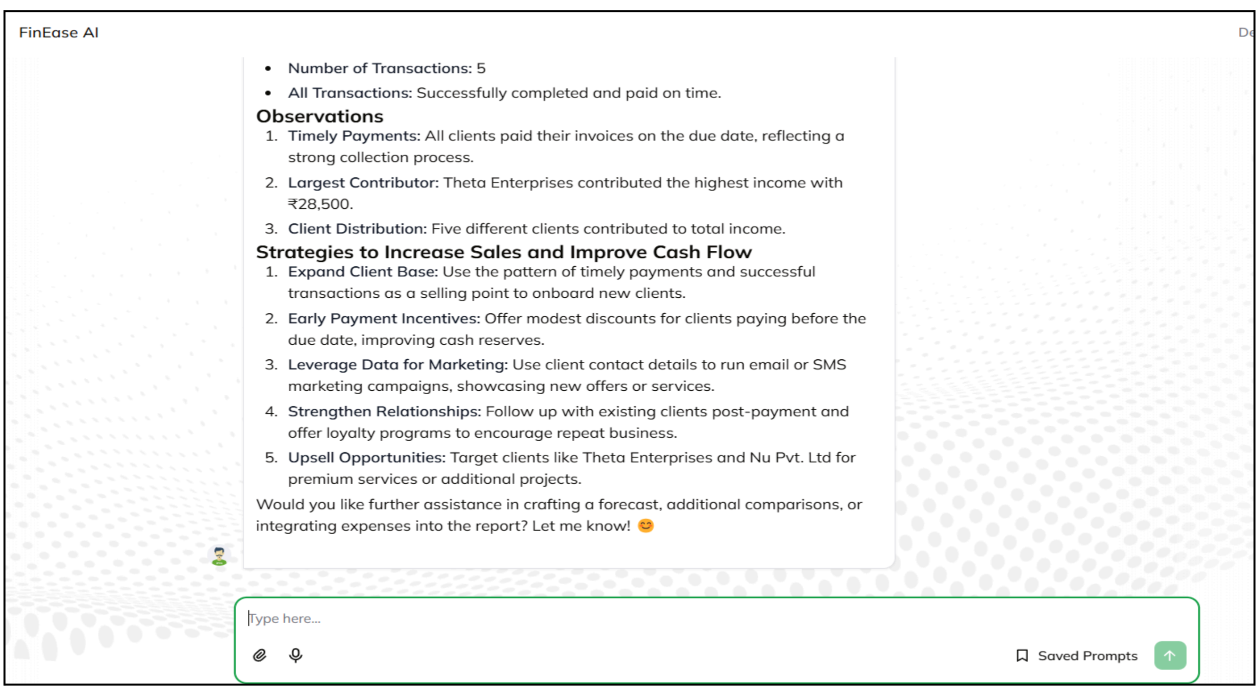




After publishing workflow we have tested it with prompt



Strategies to increase sales and improve cash flow :



To Be Continued…..