SYRUS HACKATHON 2025

Category Code: C3

Problem Statement Title: Loan approval classification with a general purpose economic chatbot

Team Name: CodeZilla

Institute Name: Vivekanand Education Society's Institute of Technology

UPTIQ | Unstop | Github | sprect | Rotary Club Bombay Chembur West | interview buddy | appwrite | .xyz | fueler | Interview Cake

Idea and Implementation

- This AI system breaks down **loan approval** into logical steps . Specialized sub-agents calculate and estimate **credit score using RAG,** ensuring accurate and fair judgement, followed by a **calculation and visualization of probability of loan acceptance.**

- **How It Works:**

  1. Sub-Agent Processing – Dedicated AI agents calculate the credit score using a vector RAG container.

  2. Data-Driven Calculation – AI calculated probability of loan acceptance.

  3. Seamless API Integration – Enables real-time, automated loan estimation using request to models like **OpenAI's 4o, Gemini's 1.5 Flash.**

Innovation and technologies used

1. **Credit Score RAG Container**: Accurately estimates credit scores for laymen.

2. **Agentic Pipeline**: Dynamically integrates with any verified front end.

3. **Smooth Language Processing**: Ensures a seamless user experience.

4. **AI Agents**: Collect user input and call 4o and 4o mini.
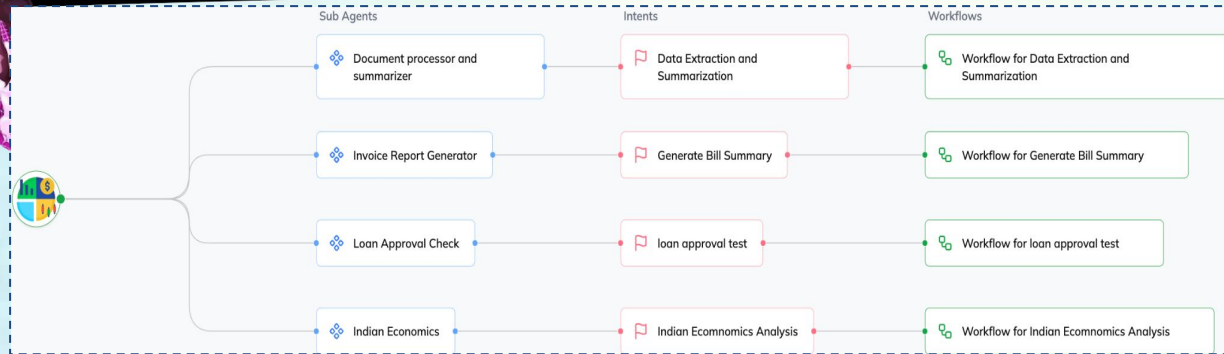
5. **Uptiq UI Integration**: Generates responses in a user-friendly format.

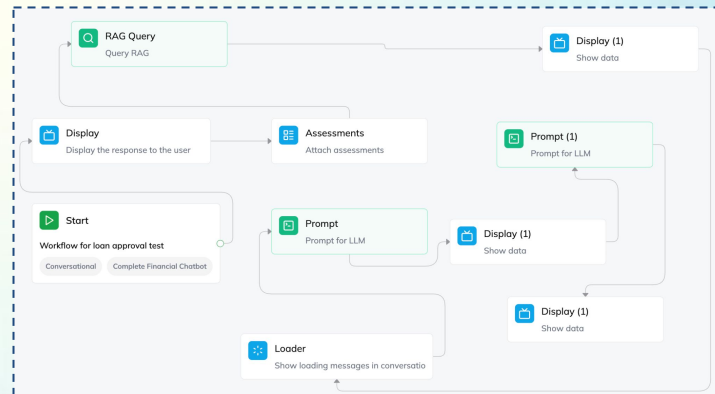# Our Agent. The Solution.
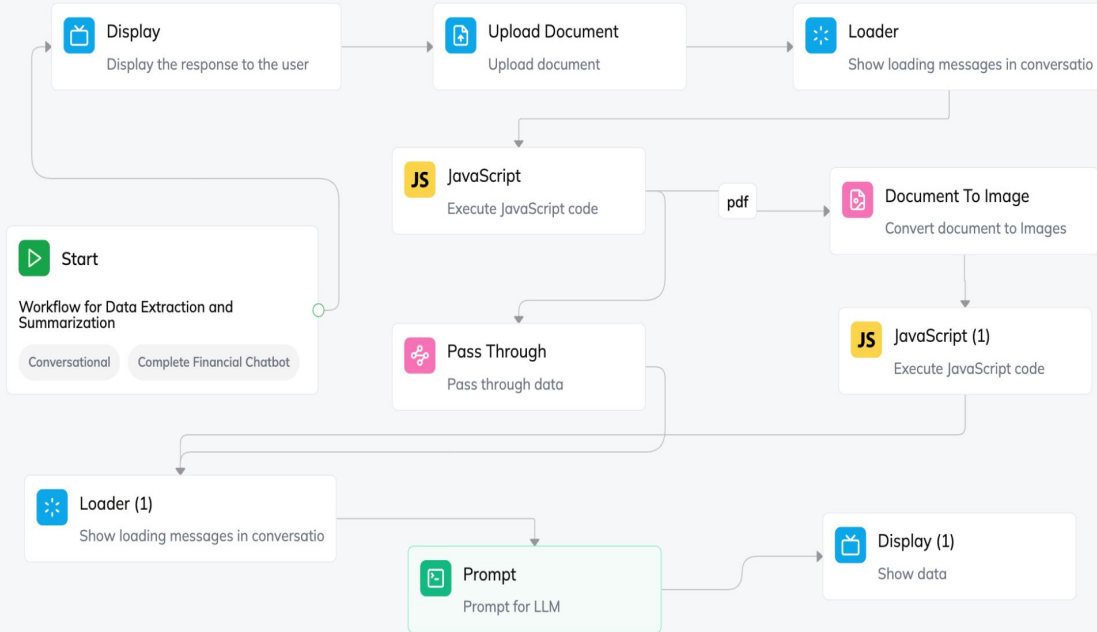

Overview of our agent

Data extractor and summarisor
Generative Bill summary
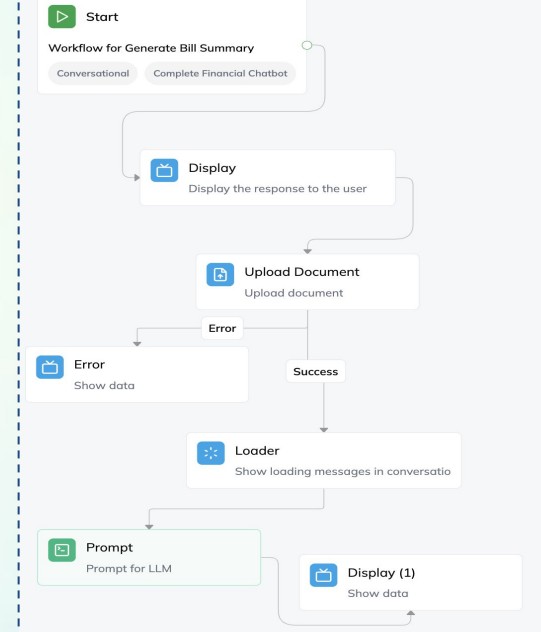Loan approver
Economic analysis

Loan Approval Agent

The loan approver collects and processes user input into a RAG query. It then forwards the query to an LLM for analysis. The LLM evaluates the data and generates a response for decision-making.

External Features and Bloatware

Document Summariser

Invoice generator

The Product.

Delving into loan approvals, we implemented the complete pipeline and successfully created a complete agent.

Implementation Demo Link:

https://tinyurl.com/mr3dkvdx

Future Objectives

1.**Enhanced AI Decision-Making** – Improve accuracy with advanced ML models for risk assessment and fraud detection.

2.**Deeper API Integration** – Expand compatibility with multiple fintech platforms for seamless automation.

3.**Adaptive Learning Mechanism** – Implement continuous learning to refine loan approval processes over time.

4.**Explainable AI (XAI) Implementation** – Ensure transparency by providing clear justifications for approval decisions.

5.**Scalability & Global Expansion** – Optimize the system for different financial regulations and international markets.

6.**User-Centric Enhancements** – Improve the custom widget with more interactive and intuitive features.