



# FinAI: Intelligent Financial Personalization

**Team:** Persona Genie

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# Problem Statement

- Modern customers expect experiences tailored to their preference.
- Business struggle to optimize engagement without deep insights



# Solution Overview

## AI-DRIVEN PERSONALIZATION

- Our approach leverages AI to offer hyper-personalized recommendations, integrating diverse data inputs including behavior, preferences, and financial history to enhance engagement.
- Delivers actionable insights to business for enhancing customer engagement.

### Features

- **Chatbot with Voice Interaction:** Enables users to interact using voice commands, making recommendations more accessible and intuitive.
- **AI-Driven Predictions:** AI-Driven Predictions: Provides personalized suggestions for credit card plans and investment opportunities based on transaction history and risk assessment. For new users, recommendations are tailored based on preferences such as travel, shopping, and lifestyle choices

# Business Impact



## ENHANCING CUSTOMER EXPERIENCE

Personalized financial insights lead to improved client satisfaction, fostering long-term loyalty and engagement.

## FINANCIAL GROWTH POTENTIAL

Institutions can expect revenue growth through enhanced services that adapt to customer needs, establishing a competitive edge.





# Investment & Card Recommendations

## Smart Credit Card Recommendations:

AI analyzes vast data to tailor investment suggestions based on individual risk tolerance and goals.

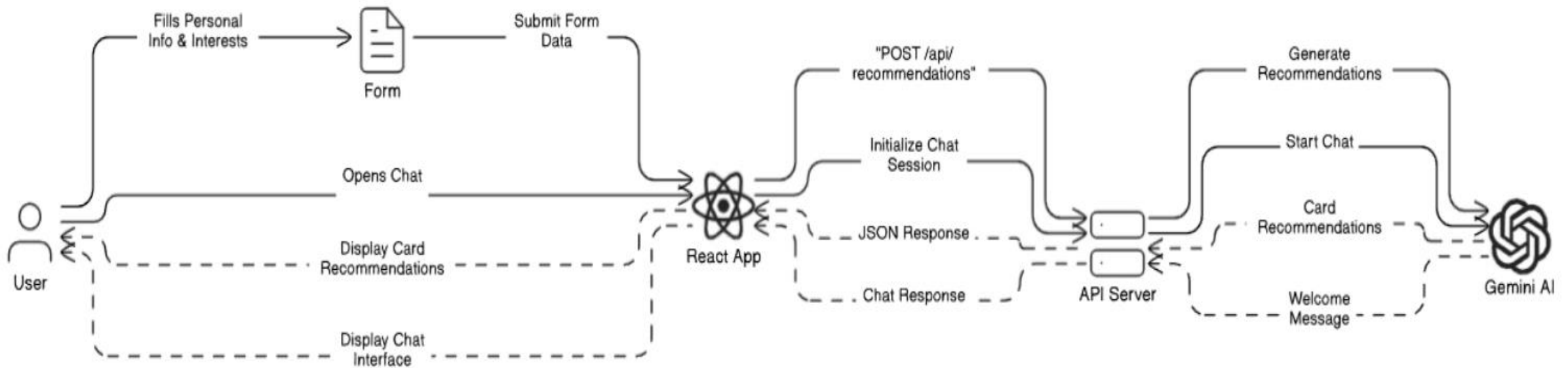
- **New Users:** AI suggests the best **credit card options** based on user preferences, spending habits, and financial background.
- **Existing Users:** AI evaluates past **transaction history** and spending patterns to recommend suitable **upgrades or new cards** that align with evolving needs.

## DATA SOURCES FOR PLANS

Investments rely on various data sources including market trends, customer portfolios, and economic reports. This broad data pool enriches the recommendations made.

# System Architecture

The system architecture combines various components such as React, Flask server, and Gemini AI, facilitating data processing and user interactions seamlessly. We utilize the Gemini AI model for intelligent recommendations, integrated with a React-based UI and a Flask backend. The system includes a chatbot for user queries and personalized credit card recommendations based on transaction history and preferences.





# Technology Stack

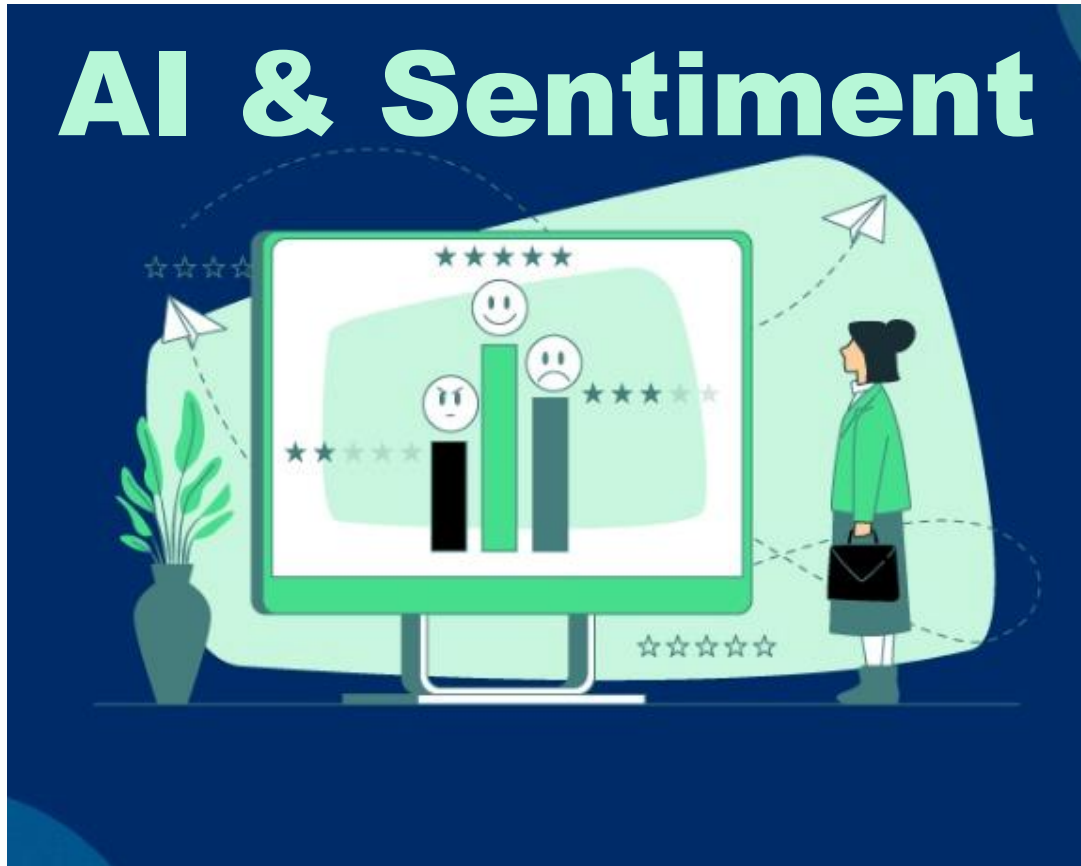
- **React** – Interactive and responsive user interface for seamless customer experience.
- **Flask** – Lightweight Python framework for API development and integration.

## Data Management:

- **JSON Files** – Storing structured data for quick access.
- **Excel Documents** – Managing and processing data inputs for recommendations.

Incorporates Gemini AI and RAG, optimizing the personalization process while maintaining high efficiency.

# AI & Sentiment



## INFLUENCES ON RECOMMENDATIONS

Customer sentiment analysis impacts recommendation algorithms significantly. Understanding emotional tone helps tailor suggestions for better user satisfaction.

## EXAMPLE AI SUGGESTIONS

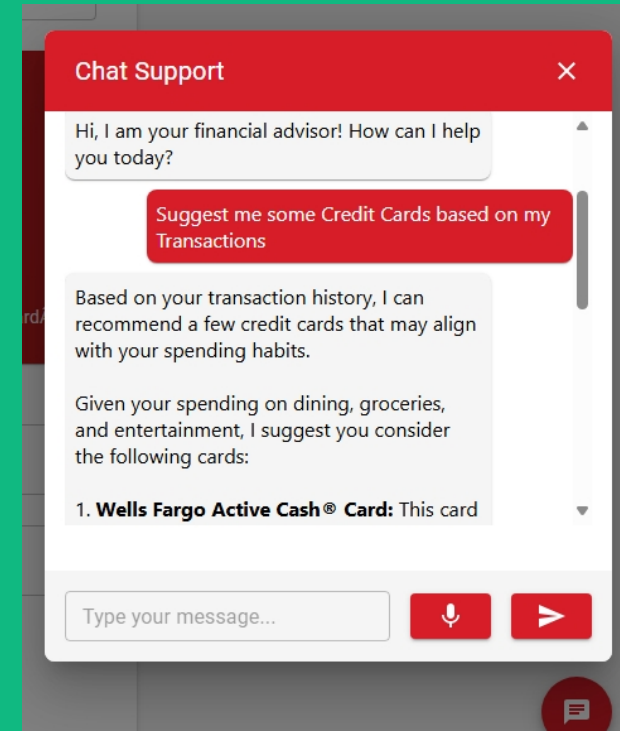
For instance, frequent travel bookings may prompt suggestions for travel reward cards, while high online spending could lead to cashback card recommendations





# AI-Powered ChatBot

Enhancing Engagement with Real time Financial Insights



Welcome Back

Select User

WELLS FARGO

6011-2345-6789-0123

Sarah Davis

Choice Privileges® Mastercard®

Name  
Sarah DavisCustomer ID  
CUS000004Location  
Houston, TXIncome  
\$115,000

Recommended Cards for You

#### Wells Fargo Autograph Journey™ Card

Given Sarah's travel spending of \$325 in the last month, this card offers a strong rewards structure for travel, specifically 5X points on hotels and 4X points on airlines. The \$115,000 income level comfortably supports the \$95 annual fee. While Houston-specific benefits aren't a factor here, the high travel rewards are valuable.

**Key Benefits:**

- 5X points on hotels
- 4X points on airlines
- \$50 annual statement credit with a minimum \$50 airline purchase

Potential Savings: The potential savings depend heavily on travel spending habits, but with the high rewards rate on travel purchases, this card offers significant value compared to the current Choice Privileges® Mastercard® which provides much less value outside of Choice hotel stays.

#### Wells Fargo Active Cash® Card

Although Sarah's current spending doesn't include dining or shopping, the 2% cash back on all purchases provides a solid foundation for general spending. This card is a good option if she starts spending on different things. With a \$0 annual fee, it's a low-risk addition, and the income level makes it easily accessible.

**Key Benefits:**

- Unlimited 2% cash rewards on purchases
- Cell phone protection
- Zero liability protection

Potential Savings: Assuming her future spending is diverse, Sarah could earn a substantial amount of cash back annually. With the 2% rewards rate, the savings would depend on her future spending habits. The zero annual fee increases the card's value.

VIEW CARD DETAILS

# Card Recommendation Flow

Receive tailored credit card suggestions based on User preferences, transaction history and spending patterns

# Future Enhancements

## **MULTI-LINGUAL SUPPORT**

Expanding language options will enable diverse user engagement, enhancing accessibility for non-English speaking customers.

## **Multi-Modal Content Recommendations**

Combine images, audio and text to generate personalized videos and links based on the user's mood.

## **LOANS & INSURANCE EXPANSION**

Future plans include extending AI recommendations to loans and insurance, broadening the range of financial products offered.



# Conclusion & Next Steps

## KEY TAKEAWAYS AND ACTION

In summary, AI-powered insights transform finance through enhanced customer engagement, personalized solutions, and future-oriented tools.

### Next Steps:

- Consider collaborating on innovative applications of this technology.
- Improve recommendation accuracy by integrating additional data.
- Dynamic refining of product suggestions by introducing real time analysis.
- Optimize UI to ensure seamless interactions with chatbot.
- Conduct Testing with various user groups to validate effectiveness of AI-driven recommendations.