

PENN - Y

Generative AI-Powered Smart Finance



Source Code : https://drive.google.com/file/d/1M3H61Wej_bjw--UscwOFC-eYtc03XdMP/view?usp=sharing

Deployed URL: <http://3.214.143.38:3000/>

MOTIVATION

- Efficiency Financial Management
- Seamless Receipt Management
- Proactive Financial Assistance

INNOVATION

- Receipt Analysis with Prompt Engineering
- Open AI-Powered Chatbot
- Personalized Receipt Categorization

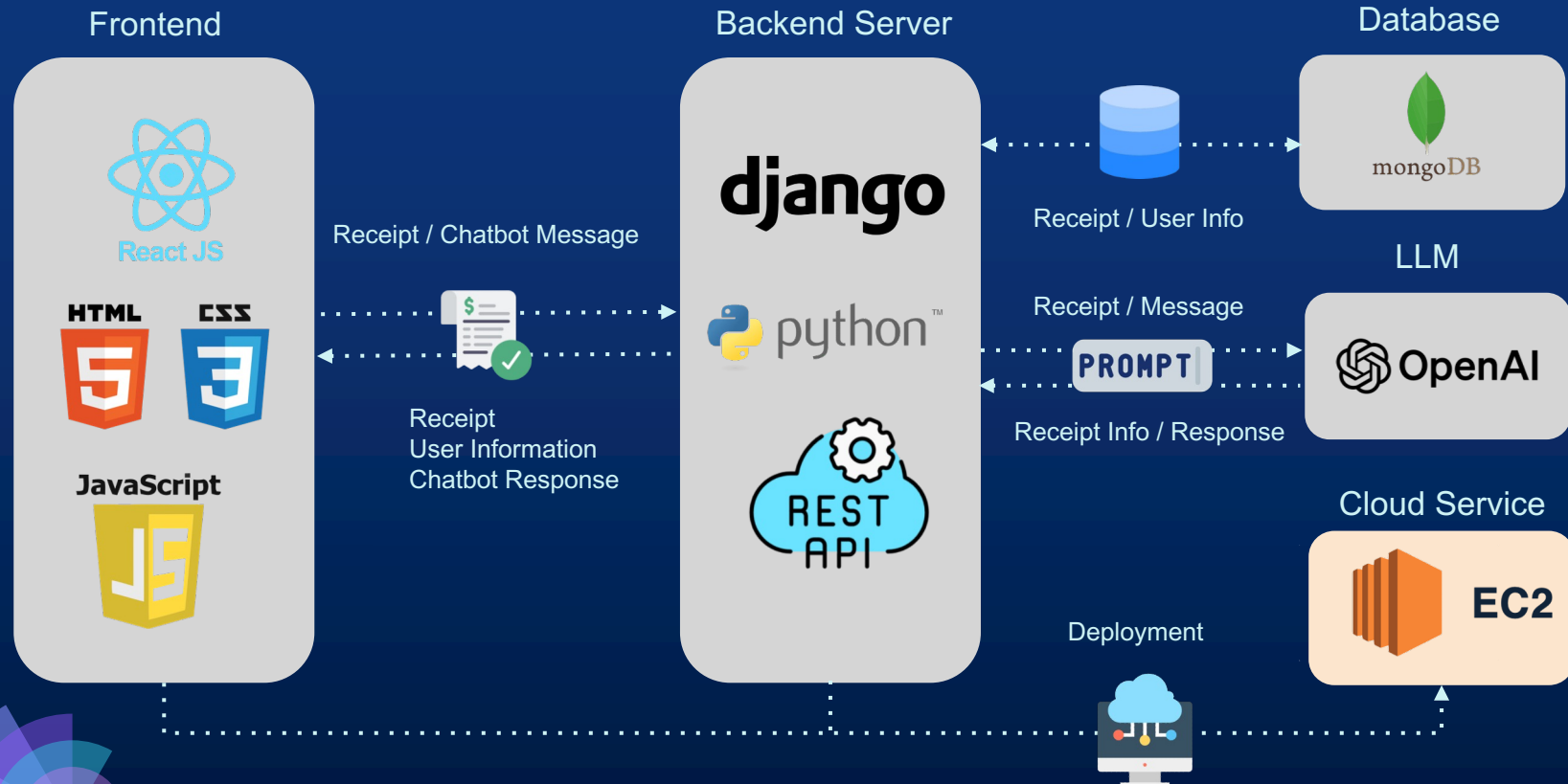


Live Demo

<http://3.214.143.38:3000/>

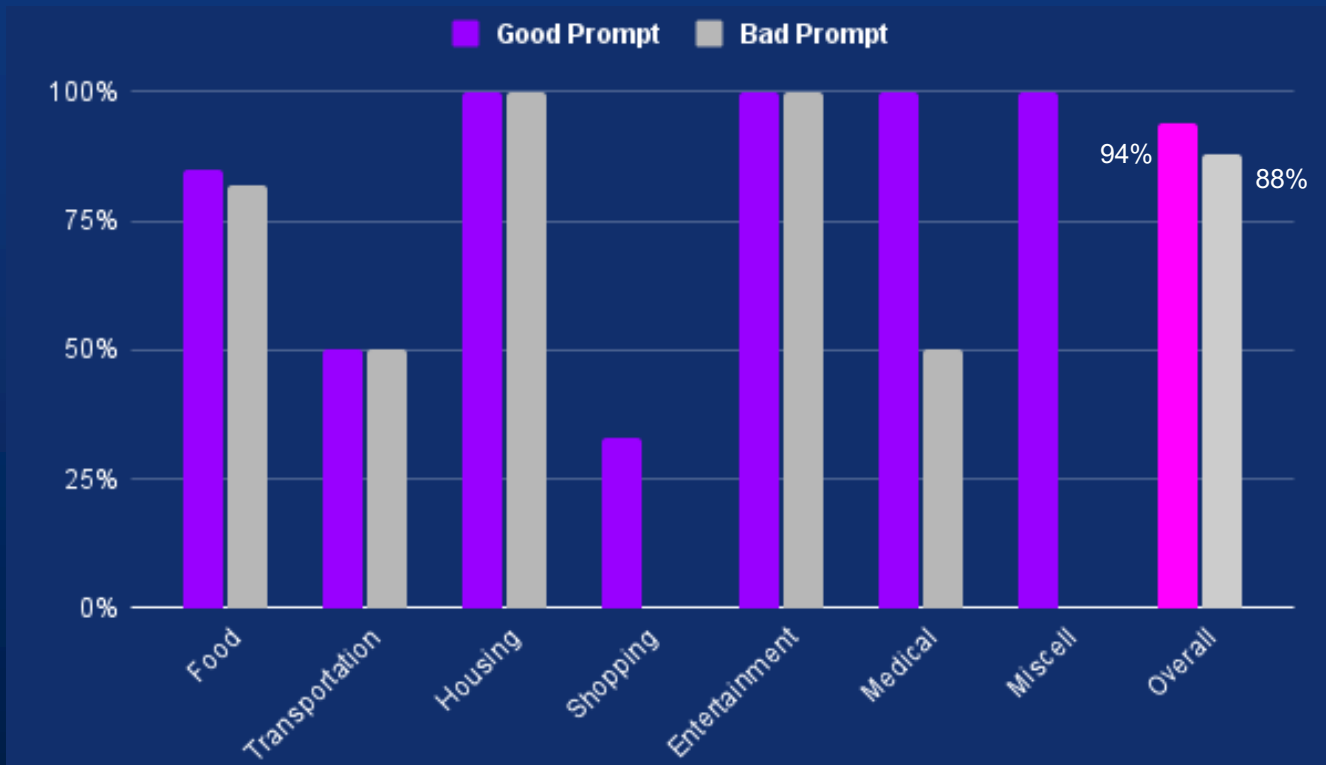


Tech Stack and System Flow



Data Fidelity

Enhance the accuracy of data extraction by utilizing prompt engineering techniques.



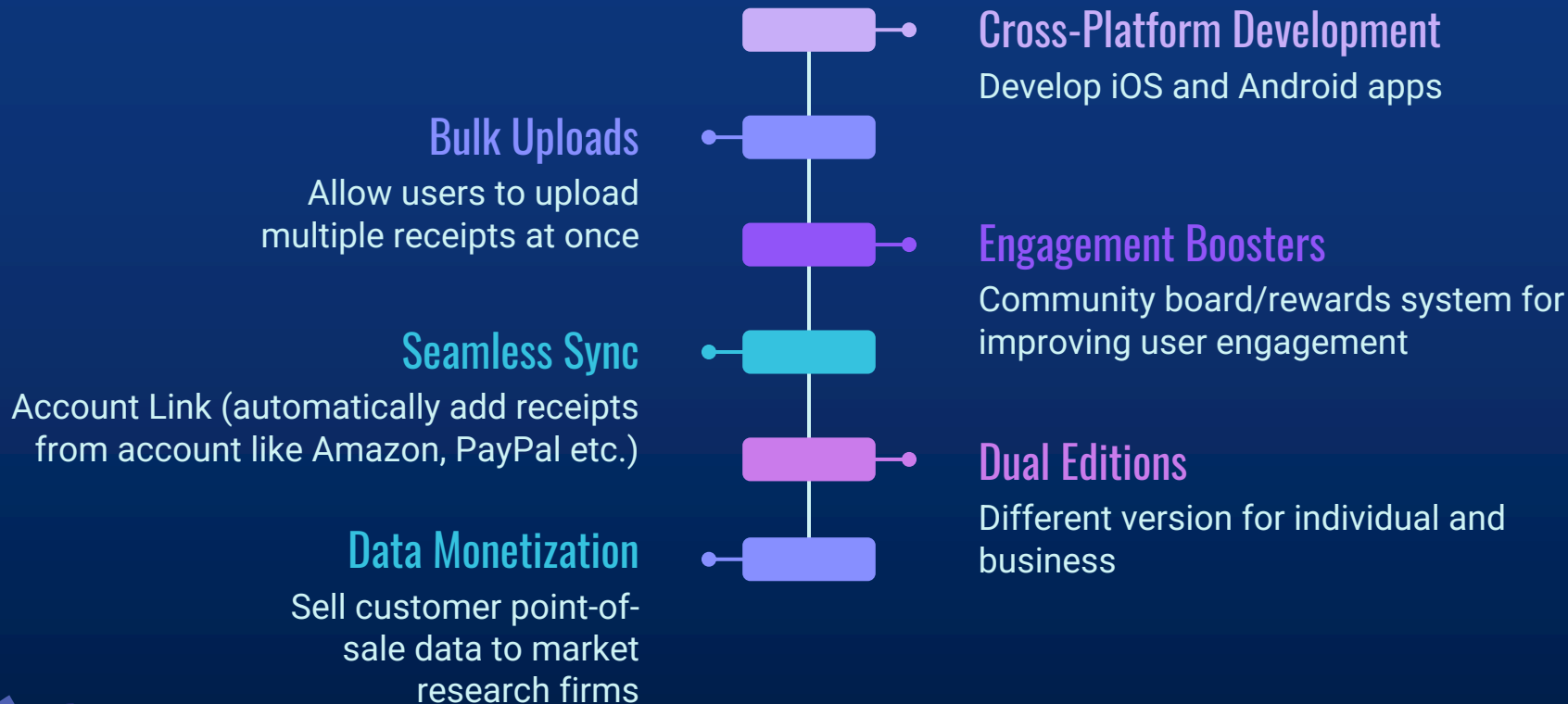
Competitor Analysis



	Processing Time	Accuracy	Reviews	Rating	Free Plan	Revenue Model	Main Features	Major Pain Points
Penny	10-20 sec	94%	-	-		-	1. Smart receipt category 2. Interactive dashboard 3. Budgeting planning	-
Expensify	> 2 mins	98.6%	140K	4.7	 (Free for 25)	Subscription	1. Receipt scanning 2. Real-time expense reporting and approval workflows	Poor performance in scanning receipts
Receipt Jar	< 5 days	-	36K	4.8		Market Research	1. Point reward systems	Slow upload & cannot upload receipt from photos
SimplyWise	5-10 secs	80%	20K	4.8	 (Free for 25)	Subscription	1. Import email receipts 2. Export to PDF and Excel 3. Family space	US phone # required & receipts are not saved sometimes



Product Roadmap



Our Team

NORRIS
CHEN

Frontend
Engineer
MCIT '24



NOLLIE
CHEN

Prompt
Engineer
MCIT '25



HARRY
WU

Prompt
Engineer
CIS '25



AUSTIN
LIN

Backend
Engineer
MCIT '25



PETER
HUANG

Product
Manager
CIS '24



Appendix – Good Prompt VS Bad Prompt (Example)



Bad Prompt

Categorize this receipt.



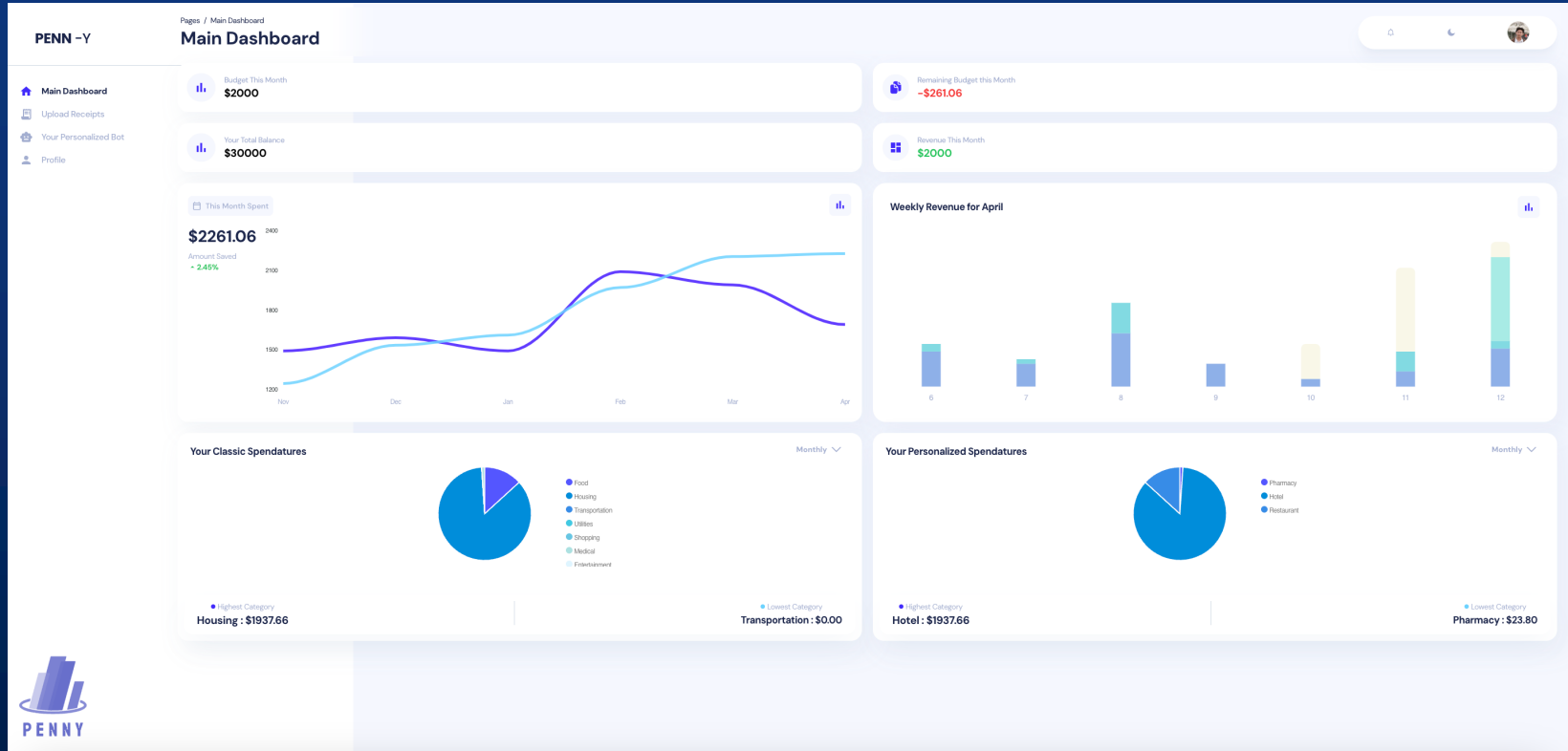
Good Prompt

Your task is to categorize the receipt based on your knowledge as detailed as possible, e.g., Italian Restaurant. Try to use the existing categories delimited with triple backticks.

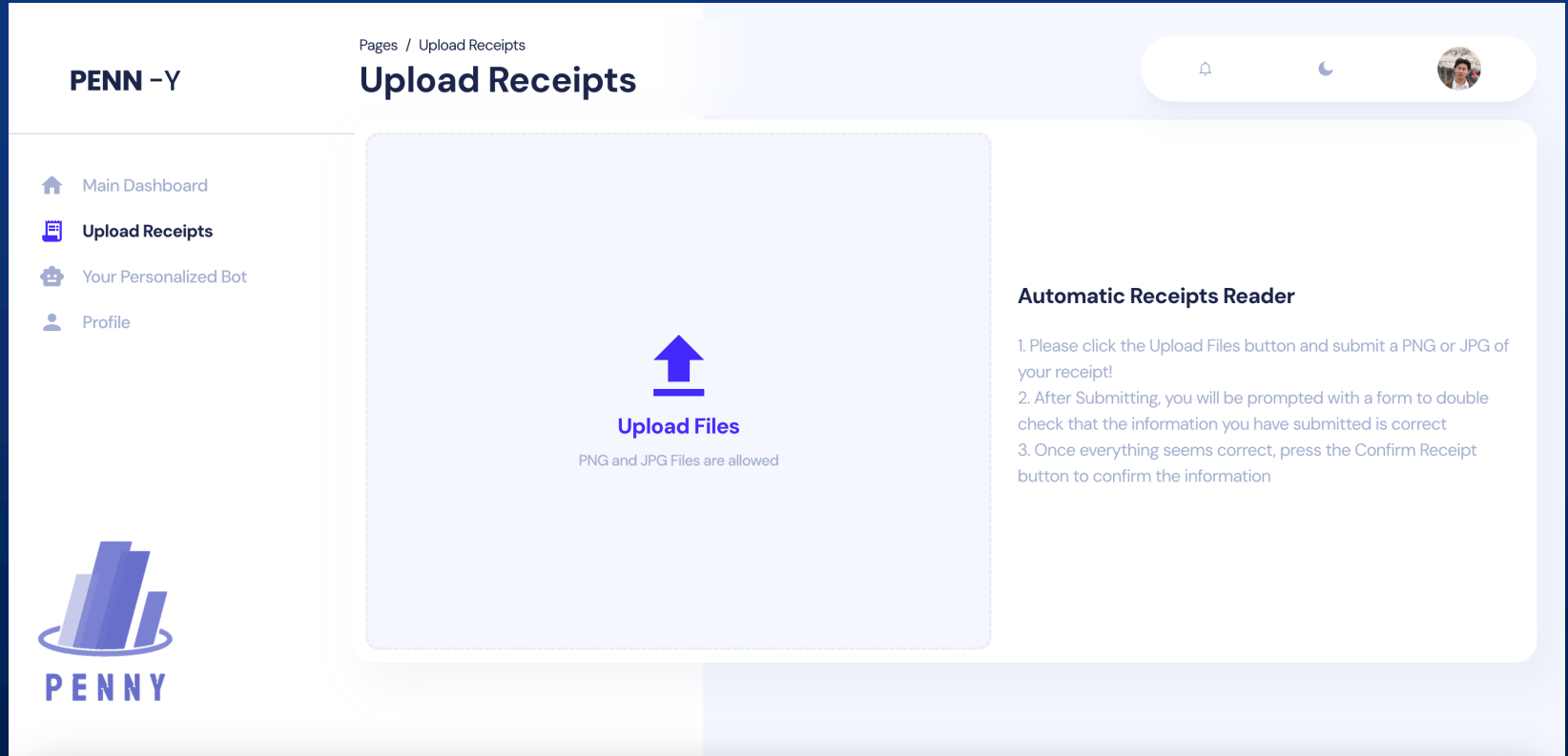
If none of the categories can represent the expense, you can create new categories. But try not to create too many.

Category: "{sub_category_set}"
Please only return the most matched name of the category without any triple backticks and redundant information.

Appendix – User Interface (Dashboard)





Appendix – User Interface (Receipt Upload)





Appendix – User Interface (Chatbot)


PENN –Y

 Main Dashboard

 Upload Receipts

 **Your Personalized Bot**


 Profile



Pages / Your Personalized Bot


Your Personalized Bot

Penn-Y



Hi! My name is Penny, your Generative-AI Personal Budget Bot


I can answer questions about your current purchases and budget! Please ask me things about your receipts like how much you spent or how many receipts you have





Based on the receipts information given, you spent \$23.80 on Medical.


I hope that answered your question! Do you have any other questions for me?

Type the message ...





How much did I spend on medical?





Thank you

