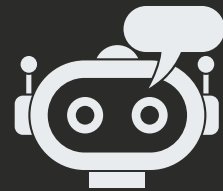


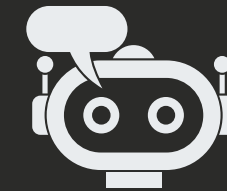
*Flipkart*



**GRID** 3.0



**CONVERSATIONAL**  
CREDIT APPLICATION



**TEAM ALPHAQ**



**BITS PILANI**

# TEAM DETAILS

Team Name	AlphaQ		
Institute Name	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCES, PILANI		
Name	Shaurya Puri	Dhruva Raja	Kunal Kariwala
Batch	2023	2024	2023



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To create a conversational chatbot to facilitate form based user experience ranging from financial fields to customer surveys.

# GLOSSARY

This section contains a brief overview of the technologies kept in mind during the ideation phase of the product

## **Rasa -**

An open source machine learning framework for text and voice-based conversations. Rasa Forms have been used to help guide conversational flow and extract information from the user.

## **Rasa X -**

Rasa X is a tool for conversation-driven development, analysis of user conversations and continuous improvement of the AI assistant.

## **React.js -**

The front end will be set up using React and other frameworks like Bootstrap.



 **P0**

**Credit Card  
Applications**

 **P1**

**Flipkart Pay  
Later**

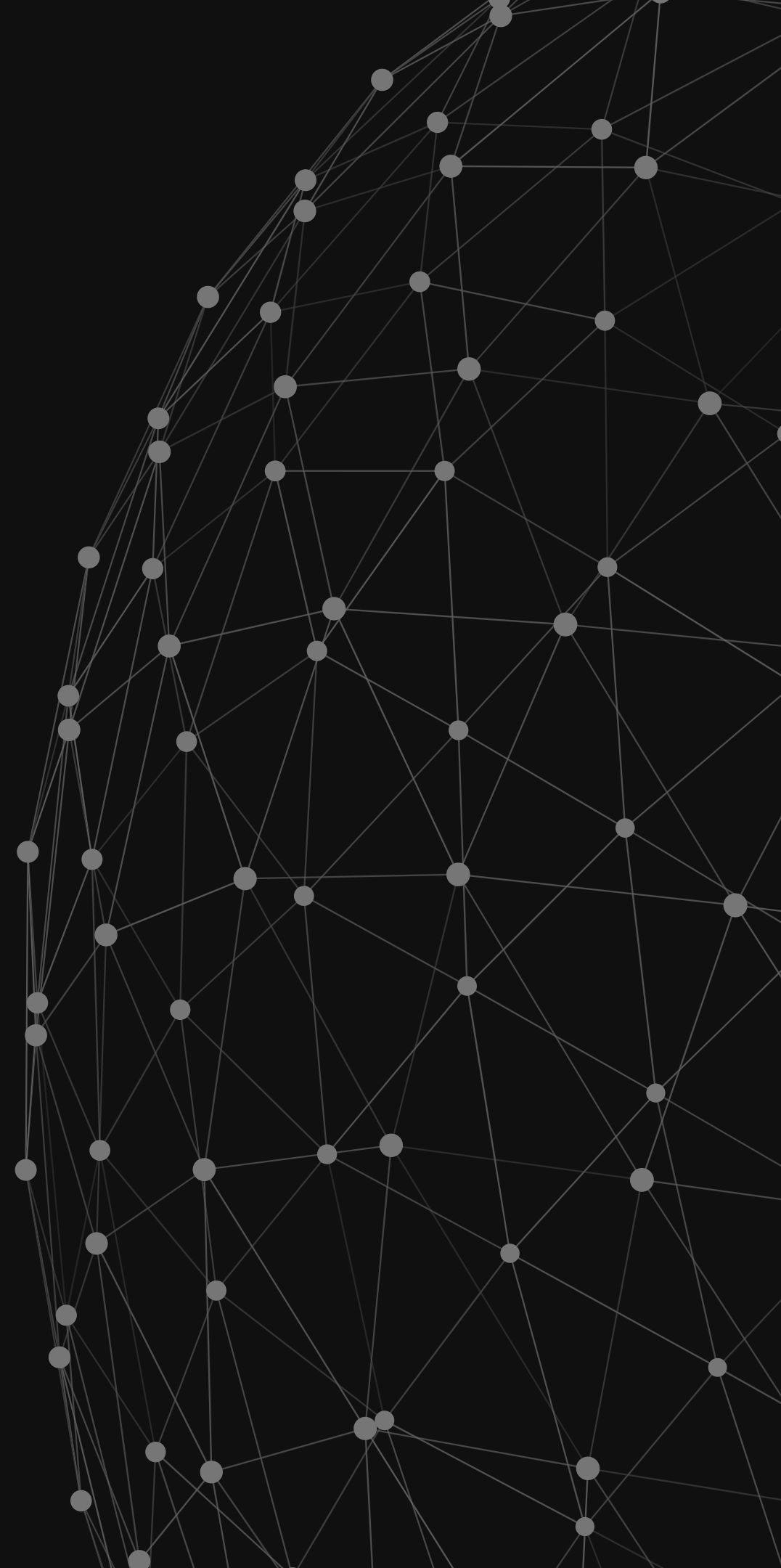
**USE  
CASES**

**Open a  
Bank  
Account**

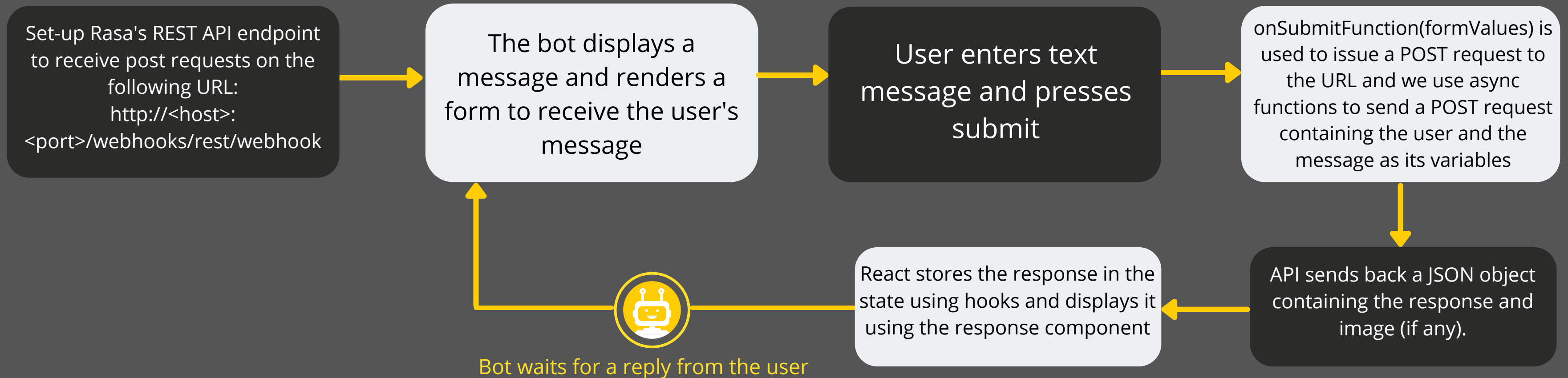
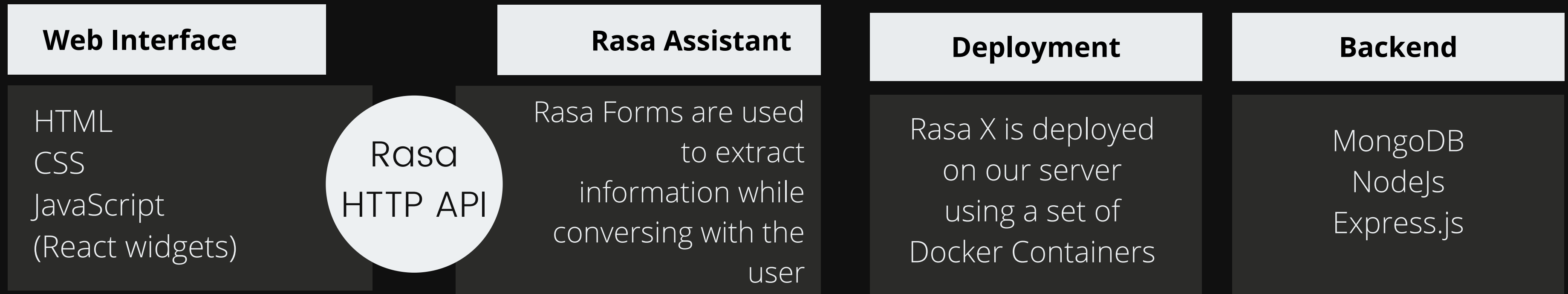
 **P2**

**Customer  
Satisfaction  
Survey**

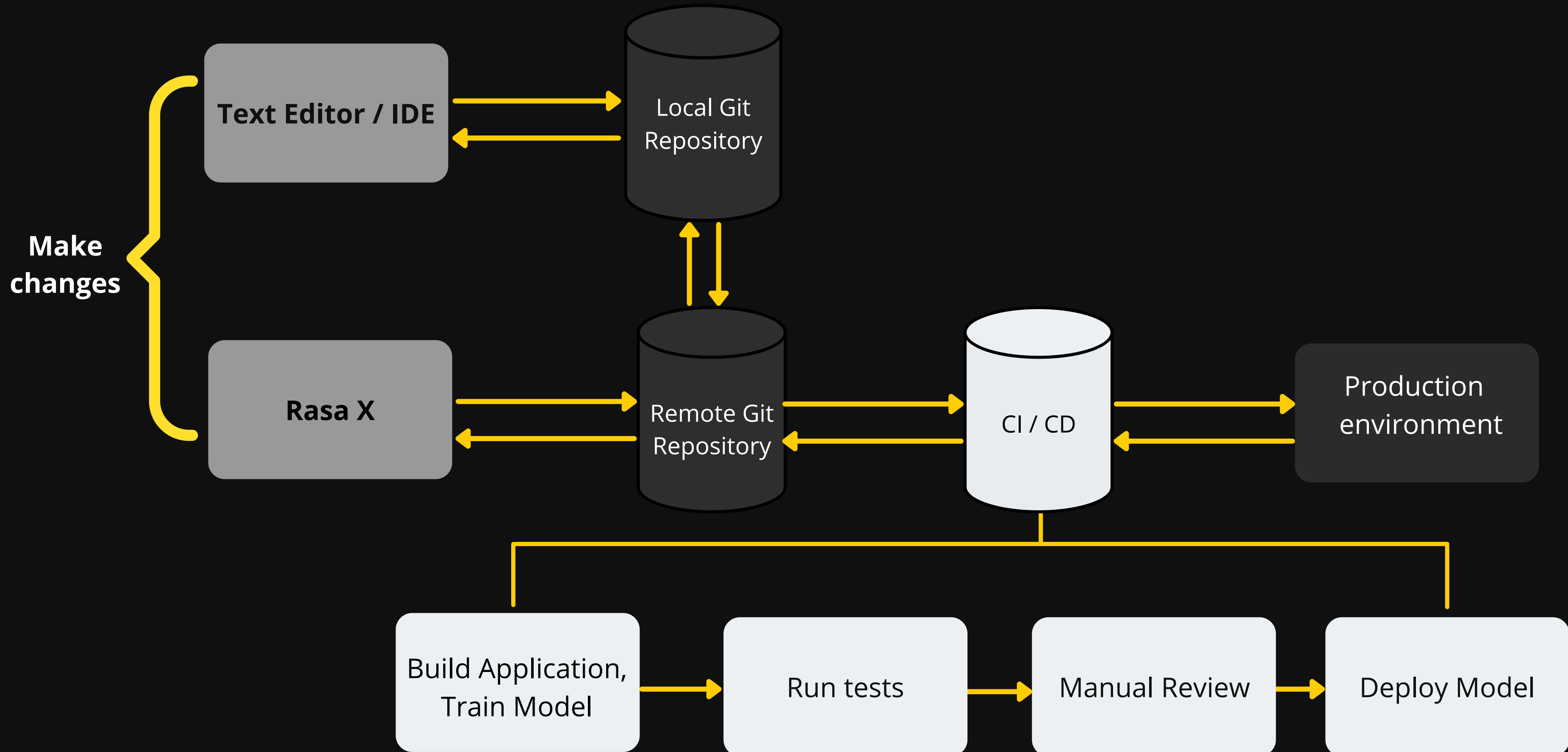
 **P3**



# SYSTEM DESIGN



# SYSTEM DESIGN





# Credit Card Recommendation Prototype



Flipkart

Hello Kunal! Do you have a specific credit card in mind or would you like me to recommend one for you?

Please recommend one for me

Alright! What would you be using this credit card for? You can select multiple options

Movies

Travel

Shopping

Business

University

Food

What is the range of maintenance charges that suits you the best?

₹0

₹2000

What bank account do you currently use?

I do not have a bank account

Axis Bank

Axis Bank

Flipkart

Based on the answers you have given, I found the following credit cards for you

HSBC Visa Platinum

- Nil joining and annual fees
- Fuel surcharge waiver
- Air miles conversion on InterMiles, British Airways and Singapore Airlines
- Discounts on movies, flights, restaurants and more

Standard Chartered DigiSmart

- Nil joining and annual fees
- Fuel surcharge waiver
- Air miles conversion on InterMiles, British Airways and Singapore Airlines
- Discounts on movies, flights, restaurants and more

HSBC Visa Platinum

That's a great choice! Let's start with the Application process. What's your full name? (First Middle Last)

Kunal Ashish Kariwala

Okay Kunal Ashish Kariwala, what is your email ID? (blah@ymail.com)

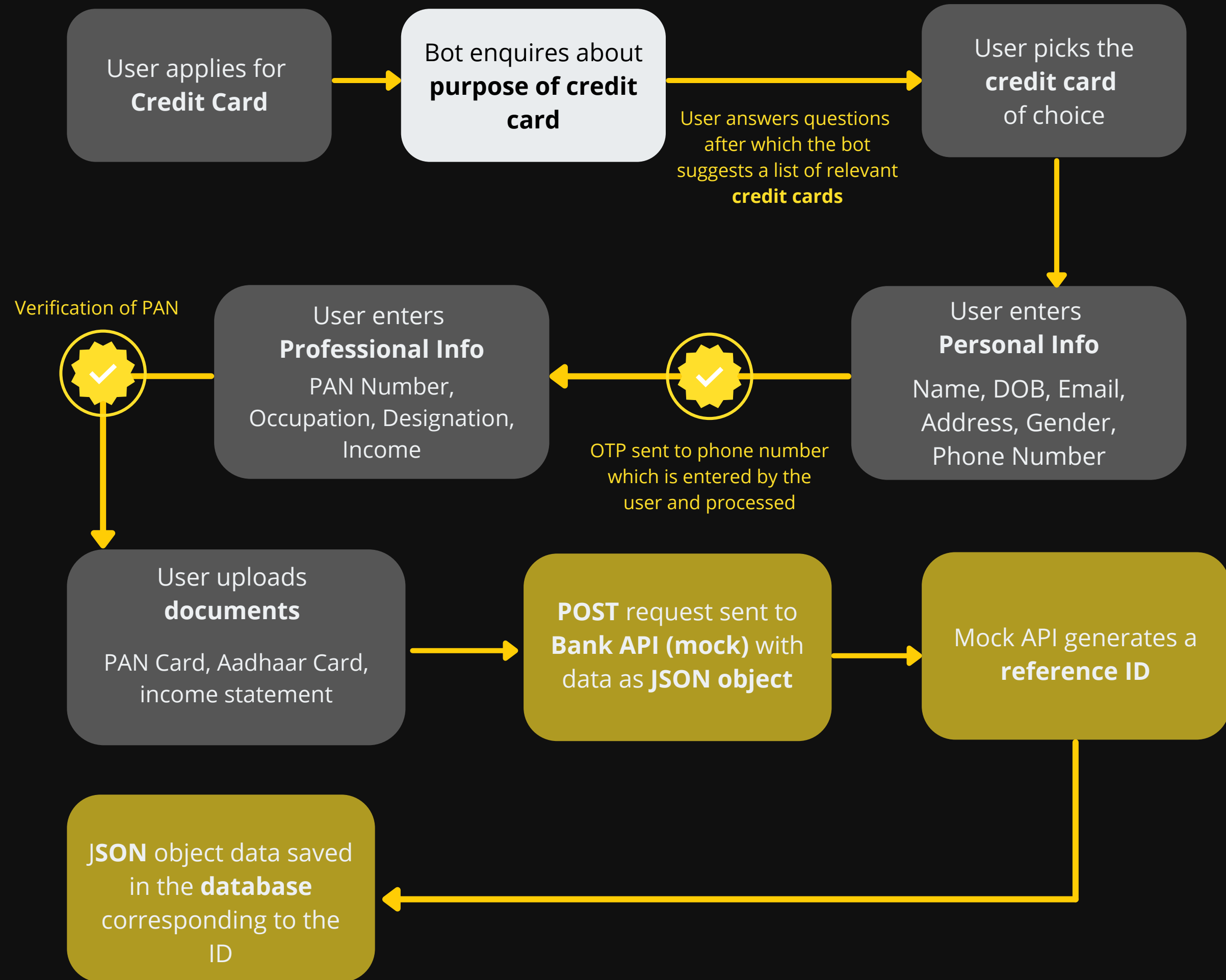
kunalkariwala2268@gmail.com

Axis Bank

DYNAMIC CHAT  
PROTOTYPE

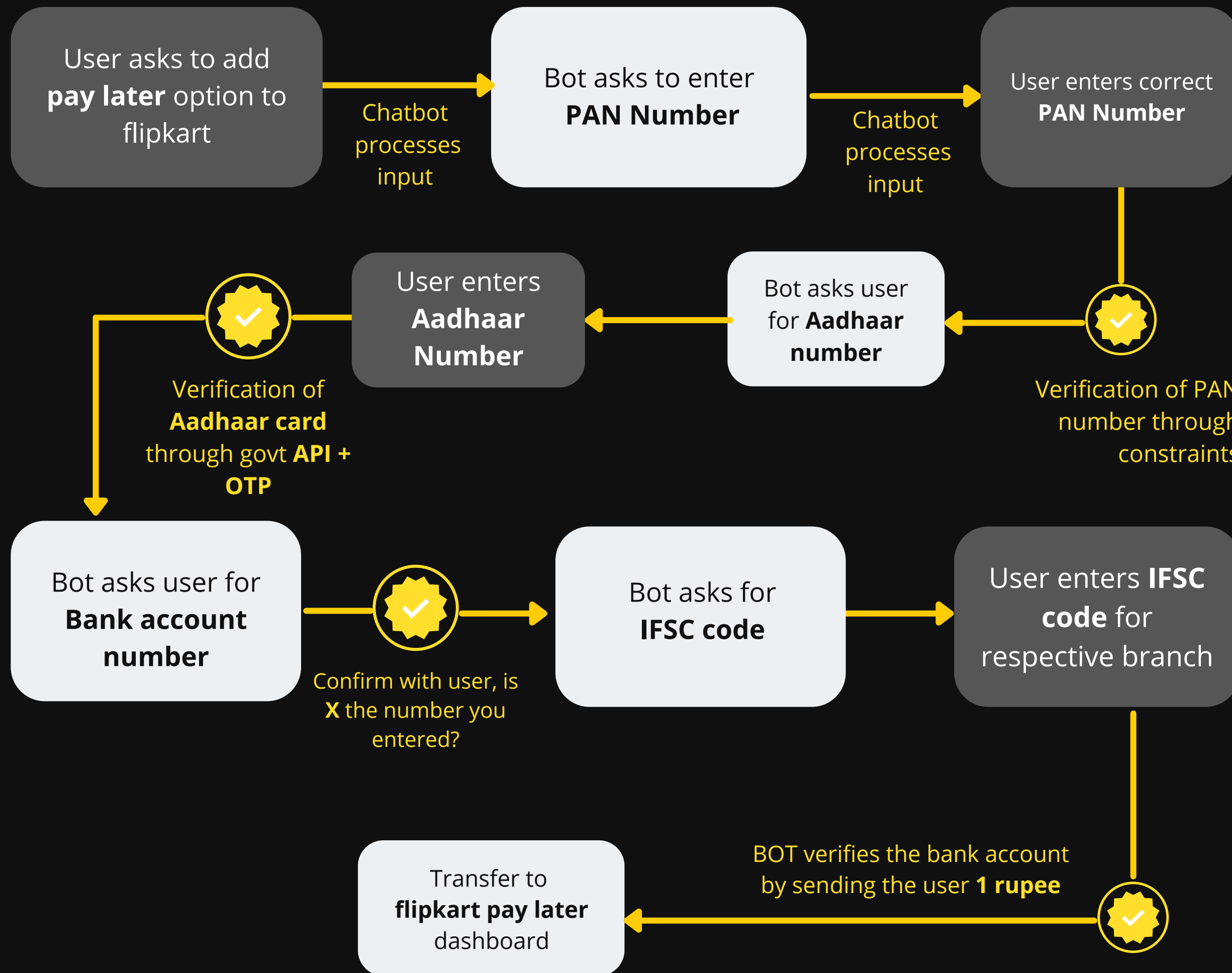


# CREDIT CARD APPLICATIONS



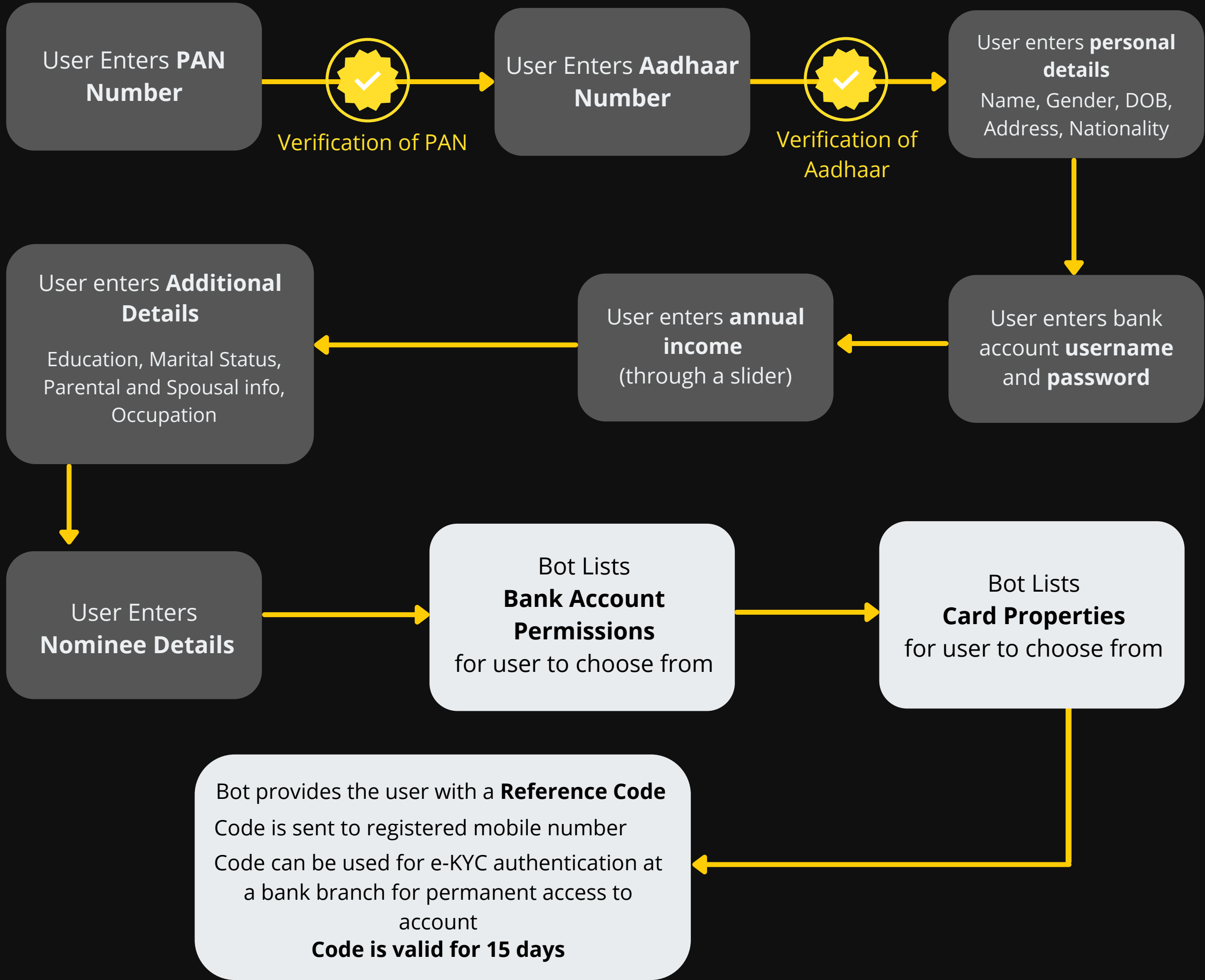
## METADATA SCHEMA

Label	Datatype	Constraints
Pan Number	Alphanumeric	Length = 10
Aadhar Number	Numeric	Length = 12
Name	String	Length > 0
Gender	Value Options	Value Options
Date Of Birth	Date	DD/MM/YYYY
Address	Alphanumeric	Length > 0
Nationality	Alphabet	Length > 0
Income	Value Options	Value Options
Card Name	Value Options	Value Options



## METADATA SCHEMA

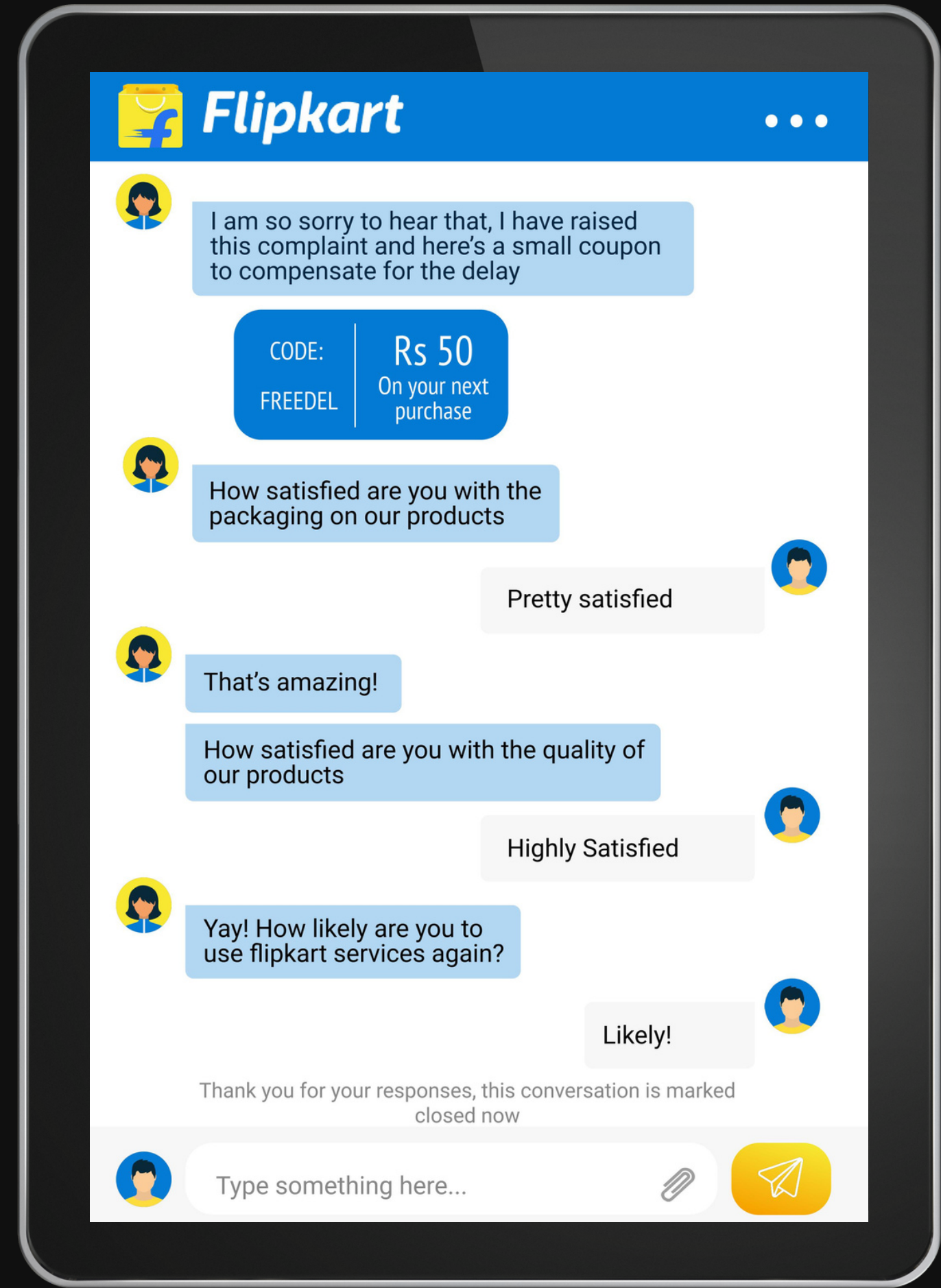
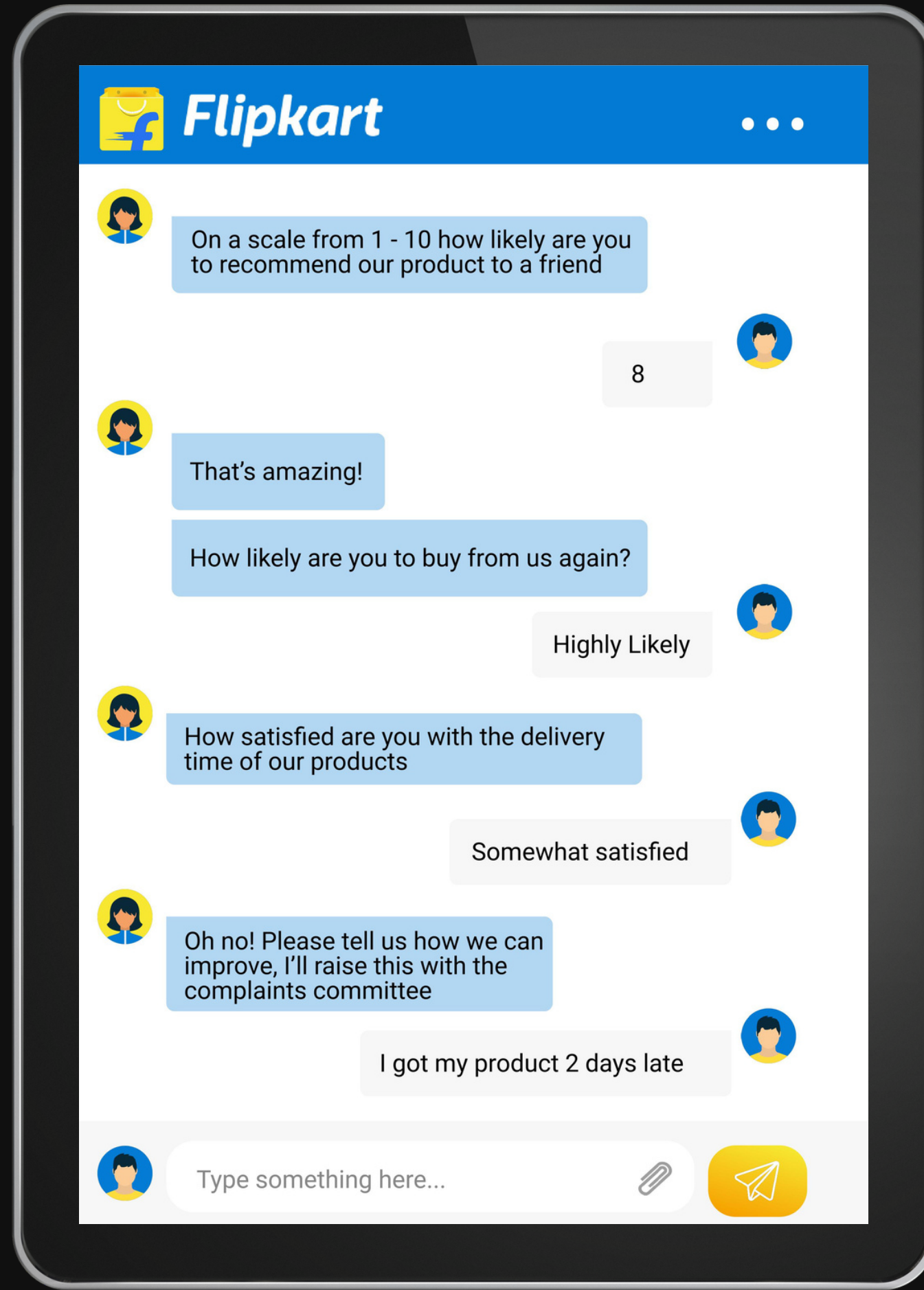
Label	Datatype	Constraints
Pan Number	Alphanumeric	Length = 10
Aadhar Number	Numeric	Length = 12
Bank Acc. Number	Alphanumeric	Different for every bank
IFSC Code	Alphanumeric	Length = 11



## METADATA SCHEMA

Label	Datatype	Constraints
Pan Number	Alphanumeric	Length = 10
Aadhar Number	Numeric	Length = 12
Name	String	Length > 0
Gender	Value Options	Value Options
Date Of Birth	Date	DD/MM/YYYY
Address	Alphanumeric	Length > 0
Nationality	Alphabet	Length > 0
Permission Type	Value Options	Value Options
Card Type	Value Options	Value Options
Income	Long	x > 0

# Customer Satisfaction Survey UI Demo



# LIMITATIONS



Servers are required to scale up the product



Government verification APIs are required to verify Aadhar card and PAN card



An existing flipkart account is required to avail the Flipkart Pay Later service



Aadhar card verification is difficult for people whose phone number is not linked to their Aadhar card



A user cannot apply for a credit card without having at least one existing bank account



# FUTURE SCOPE



Improve the algorithm for the intelligent recommendation system



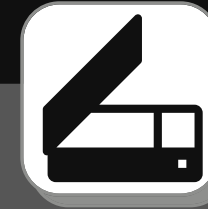
Implement a dropdown for the bank branch and name for filling the IFSC Code directly



Super coins as reward for providing feedback about the assistant



Rasa Enterprise to improve user authentication and scalability



OCR System for entity extraction from documents