Crazi teamcode 10

MVP IDEA :-PROPOSAL ATTACHMENT

CRAZIER THINKING BY YOU EXTENSION
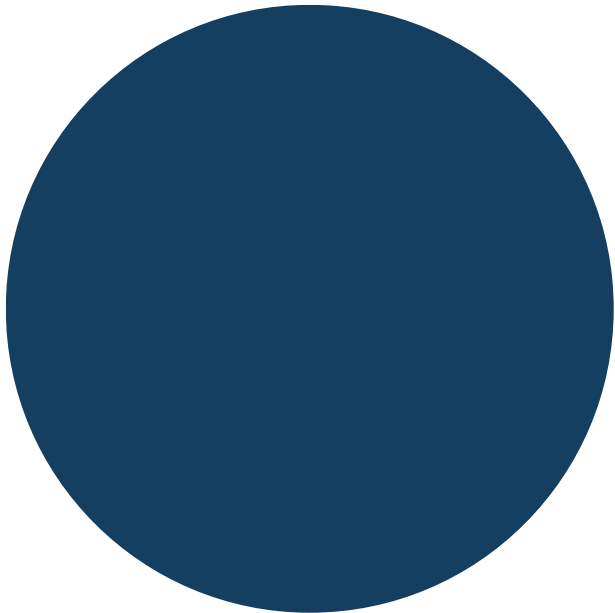
CONTENT

1.Introduction

1.1 Provide an overview of the problem, introduce the Minimum Viable Product (MVP) and its purpose, or opportunity the MVP aims to address.

overviews mvp: Our MVP is a Chrome extension aimed at increasing customer experience..

Dataset: 4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		item_id	name	category	price	old_price	sellable_online	link	other_colors	short_descripti	designer	depth	height	width
0		69208026	BESTÅ	Bookcases & s	1725	No old price	TRUE	https://www.ike	Yes	Storage c	IKEA of Swede	42	112	180
1		70328669	LIXHULT	Cabinets & cup	175	No old price	TRUE	https://www.ike	No	Cabinet,	Jon Karlsson	35	35	60
2		39283003	BROR	Bookcases & s	855	No old price	TRUE	https://www.ike	No	Shelving	IKEA of Swede	40	190	85
3		10460888	SMÅGÖRA	Children's furn	495	No old price	TRUE	https://www.ike	No	Wardrobe	IKEA of Swede	50	187	80
4		69281804	BILLY / OXBEI	Bookcases & s	915	No old price	TRUE	https://www.ike	Yes	Bookcase	Gillis Lundgrer	30	202	120
5		30248537	SNIGLAR	Beds	295	No old price	TRUE	https://www.ike	No	Cot,	IKEA of Sweden		80	66
6		40399314	KLIPPAN	Sofas & armch	1295	No old price	TRUE	https://www.ike	No	2-seat sofa	IKEA of Swede	88	66	177
7		90471581	KORNSJÖ	Chairs	375	No old price	TRUE	https://www.ike	No	Storage bench	Ebba Strandm	47	51	70
8		30323367	OXBERG	Bookcases & s	200	No old price	TRUE	https://www.ike	Yes	Glass doc	K Hagberg/M Hagberg		192	40

- Provide an overview of the problem

-People find an item that is still feeling uncomfortable for them and want to build a better version of it for them, but dont know why?

-Enterprise want to survey customer, what is item trend, see people like, idea for develope their product.

-easy way to find product better with voice consult.

1.Introduction

1.1 Provide an overview of the problem, introduce the Minimum Viable Product (MVP) and its purpose, or opportunity the MVP aims to address.

- The purpose of the MVP in this scenario is fourfold

1. User Preferences: Implement a basic system where users can set preferences such as color, style, or material for the furniture they are interested in.
2. Visual Customization: Allow users to visualize how the selected furniture would look in their own space using augmented reality or a simple photo upload feature.
3. Recommendation Engine: Integrate a basic recommendation system that suggests complementary products based on the user's preferences or previous selections.
4. Interactive Features: Add interactive elements on the product pages, such as a "design your own" option for customizable item, voice find item.
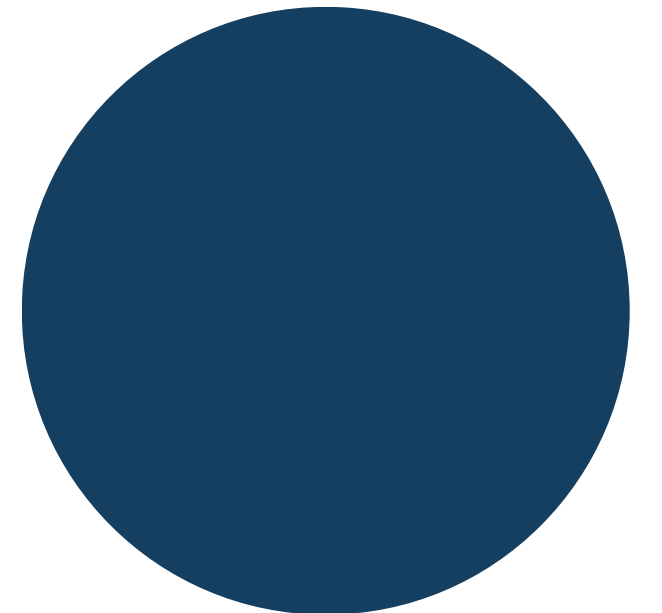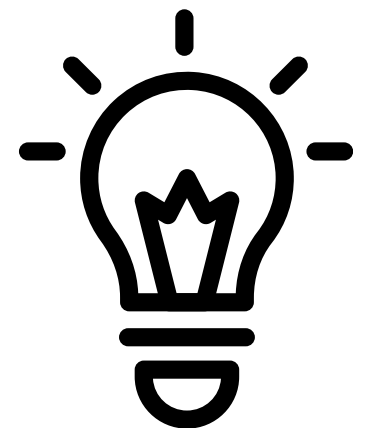
2. Problem Statement

2.1 Clearly define the problem or challenge that the MVP seeks to solve.
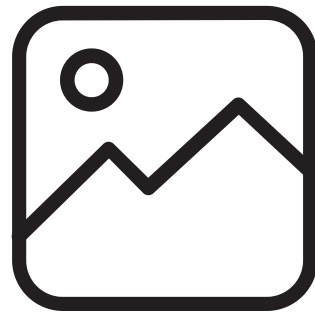
Problem 1: On the furniture website, when users select a product, they desire a personalized experience that reflects their preferences or a more creative engagement in the product experience.

Problem 2: Searching for new design ideas for a struggling business, and the Minimum Viable Product (MVP) can provide visual representations of the product for users to retain and assist the provider in enhancing the product to meet customer needs.

Problem 3: On the furniture website, when users select a product, they only use their voice; old methods are slow, not convention.

2. Problem Statement

2.2 Describe the pain points or inefficiencies associated with the problems.

Pain point 1: Lack of Personalization.
- Users may feel frustrated if the website does not offer personalized recommendations based on their preferences, leading to a generic and less satisfying shopping experience.
- Without personalization, users might have to spend more time searching through a large inventory to find products that match their taste, leading to a potential loss of interest.

Pain point 2: Limited User Engagement.
- If the product experience is not engaging or creative, users may lose interest quickly, resulting in lower interaction with the website.
- A lack of interactive features or customization options may lead to a passive browsing

Pain point 3: Missed Cross-Selling Opportunities.
- The absence of personalized recommendations may result in missed opportunities for cross-selling complementary products, reducing the overall value of each customer transaction.
- Users may not be aware of related items that could enhance their purchase, leading to potential revenue loss for the furniture website.

2. Problem Statement

2.3 Describe the current landscape and positioning of the competitors if any.

The current landscape in the online furniture market is characterized by a variety of competitors offering a range of products and services. Many players have established themselves as reliable sources for furniture purchases, creating a competitive environment where user experience and personalization are key differentiators.
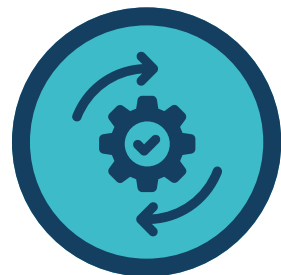
3. Solution Overview

Overview about ML models
Using OpenAI Api to create a sale assistant to suggest for customer and building a Defusion AI to design that option
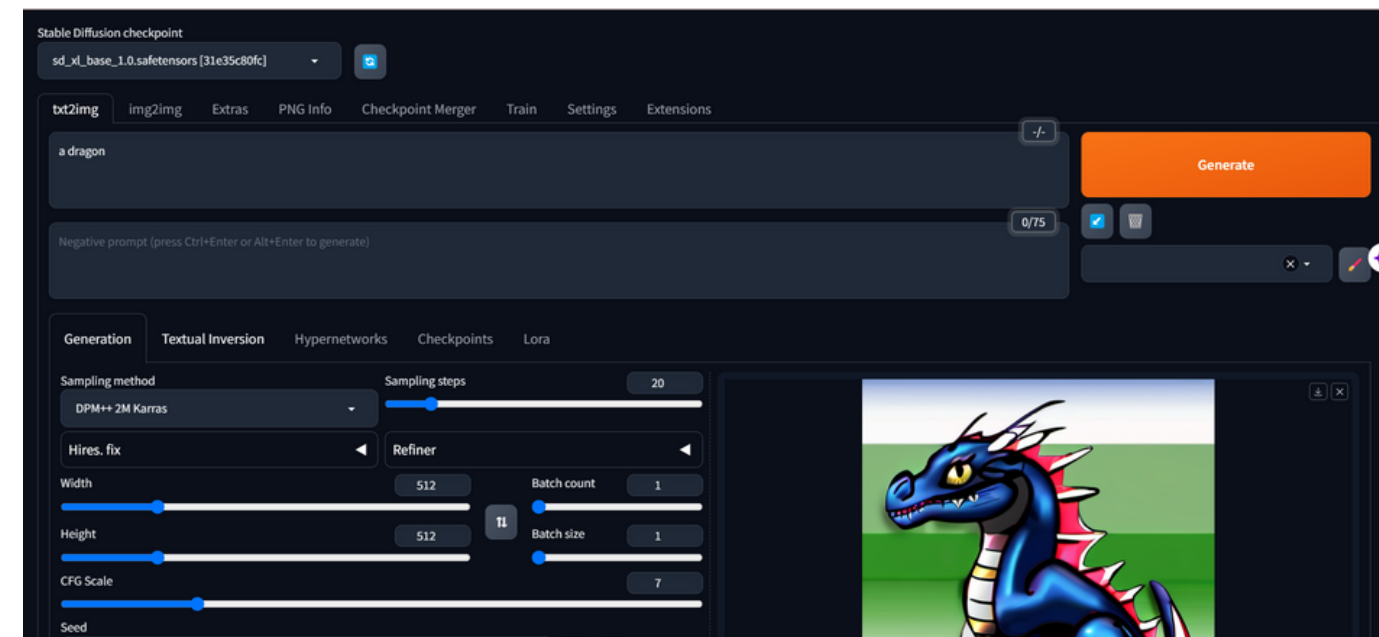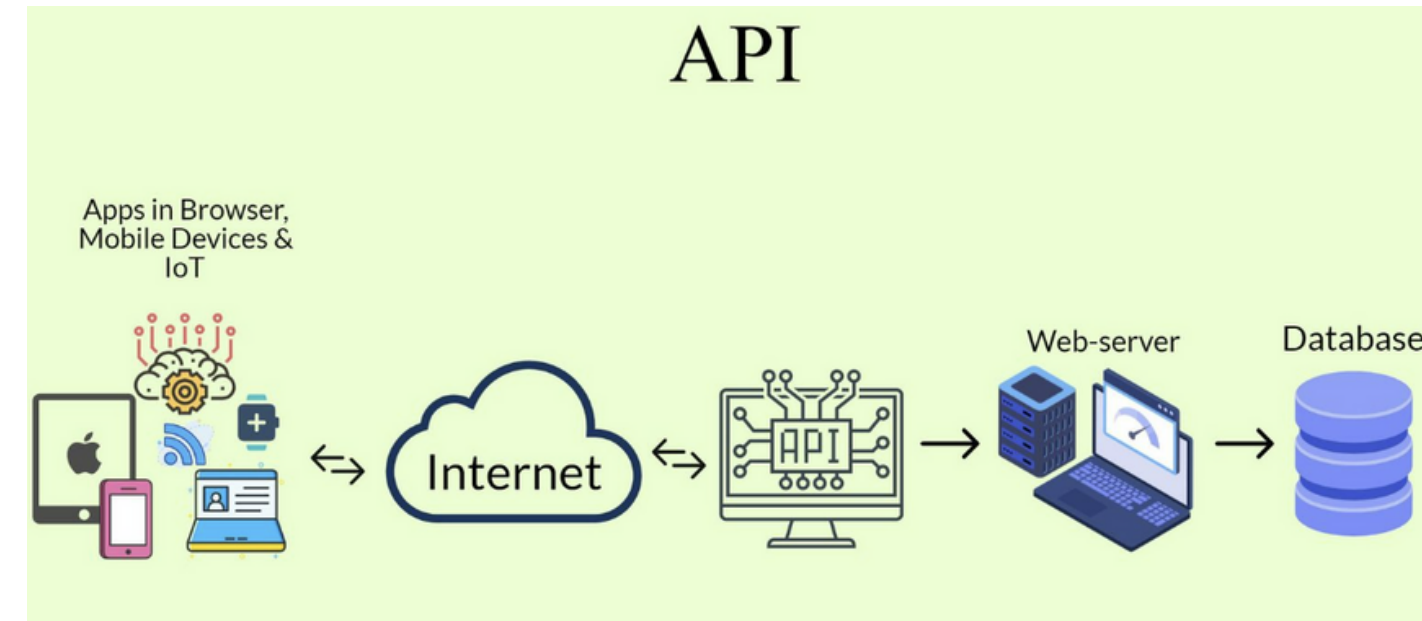
Solution to apply AI models
API Chat-GPT: get the cleaned data and interact by chatting with customer to suggest products
Model: Diffusion AI:this option will personalize their choosed product

Ability
Providing customers with personalized experiences through shaping and offering exclusive design for products."

3. Solution Overview

Create an assistant(can chat and call for customer) with available open ai Api, base on file csv with cleaned data we provided for AI assitant which included information of available product of Shop to suggest for customer what products they really want

Diffusion AI: This is a function personalize their products in their way and shop will meet they demands
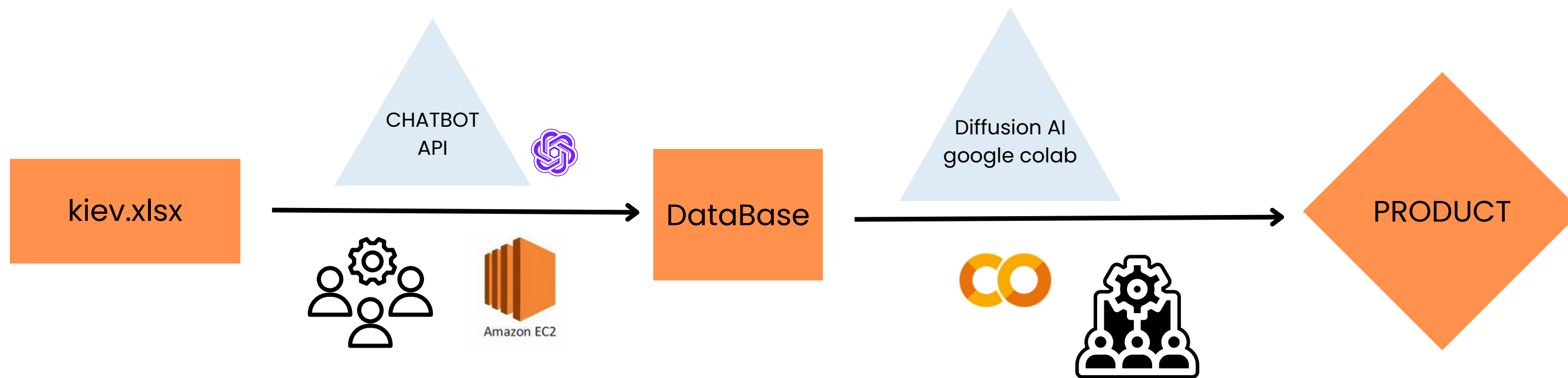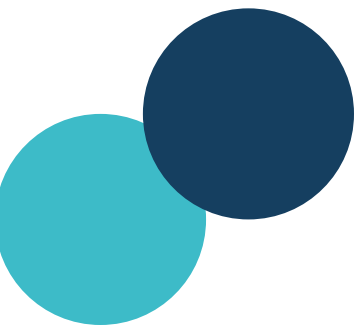
4. Methodologies

4.1 Provide a description of the architecture or structure of the AI model that you use
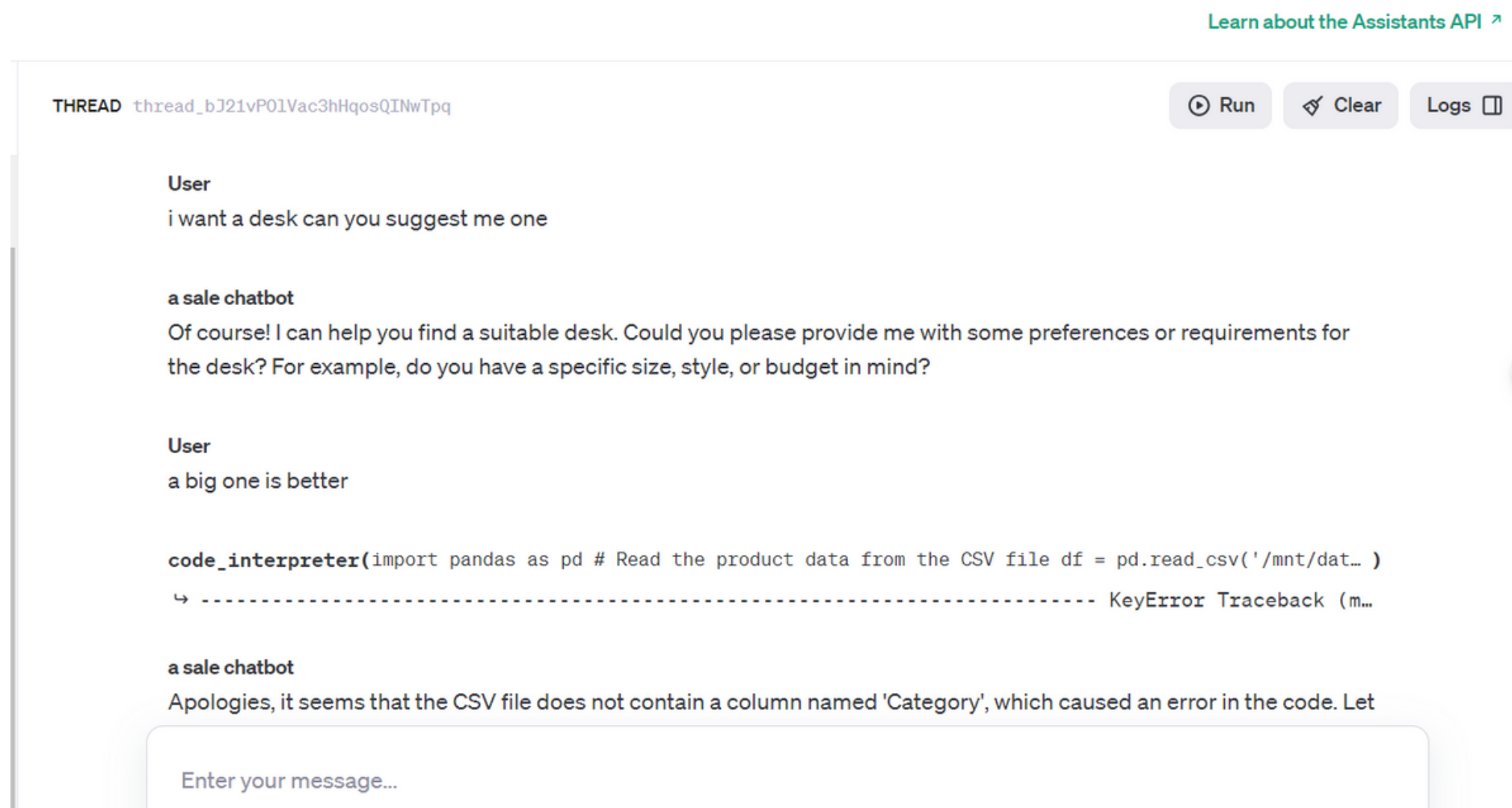
Stable Diffusion XL – SDXL 1.0 Mode

- Deep Learning Models (Deep Learning): Large Neural Networks (CNN, RNN, LSTM): for processing image, text, and time series data.
- Transformer Models (such as BERT, GPT): for natural language processing. BERT (Bidirectional Encoder Representations from Transformers) and GPT (Generative Pre-trained Transformer) Spatial
- Machine Learning (Spatial Machine Learning): Concurrent Models: Simultaneously combining information from various sources to understand the overall context.
- Reinforcement Learning (Reinforcement Learning): Deep Reinforcement Learning: used to improve the quality of responses based on increasing interaction volume.
- Natural Language Processing (NLP):
- Sentiment Analysis: To classify and understand emotions from text. Topic Classification: To determine the main topic of text content.

4. Methodology

4.1 Provide a description of the architecture or structure of the AI model that you use

Learn about the Assistants API ↗

THREAD thread_bJ21vPOlVac3hHqosQINwTpq

Run   Clear   Logs

User
i want a desk can you suggest me one

a sale chatbot
Of course! I can help you find a suitable desk. Could you please provide me with some preferences or requirements for the desk? For example, do you have a specific size, style, or budget in mind?

User
a big one is better

```
code_interpreter(import pandas as pd # Read the product data from the CSV file df = pd.read_csv('/mnt/dat… )
↳ --------------------------------------------------------------------- KeyError Traceback (m…
```

a sale chatbot
Apologies, it seems that the CSV file does not contain a column named 'Category', which caused an error in the code. Let
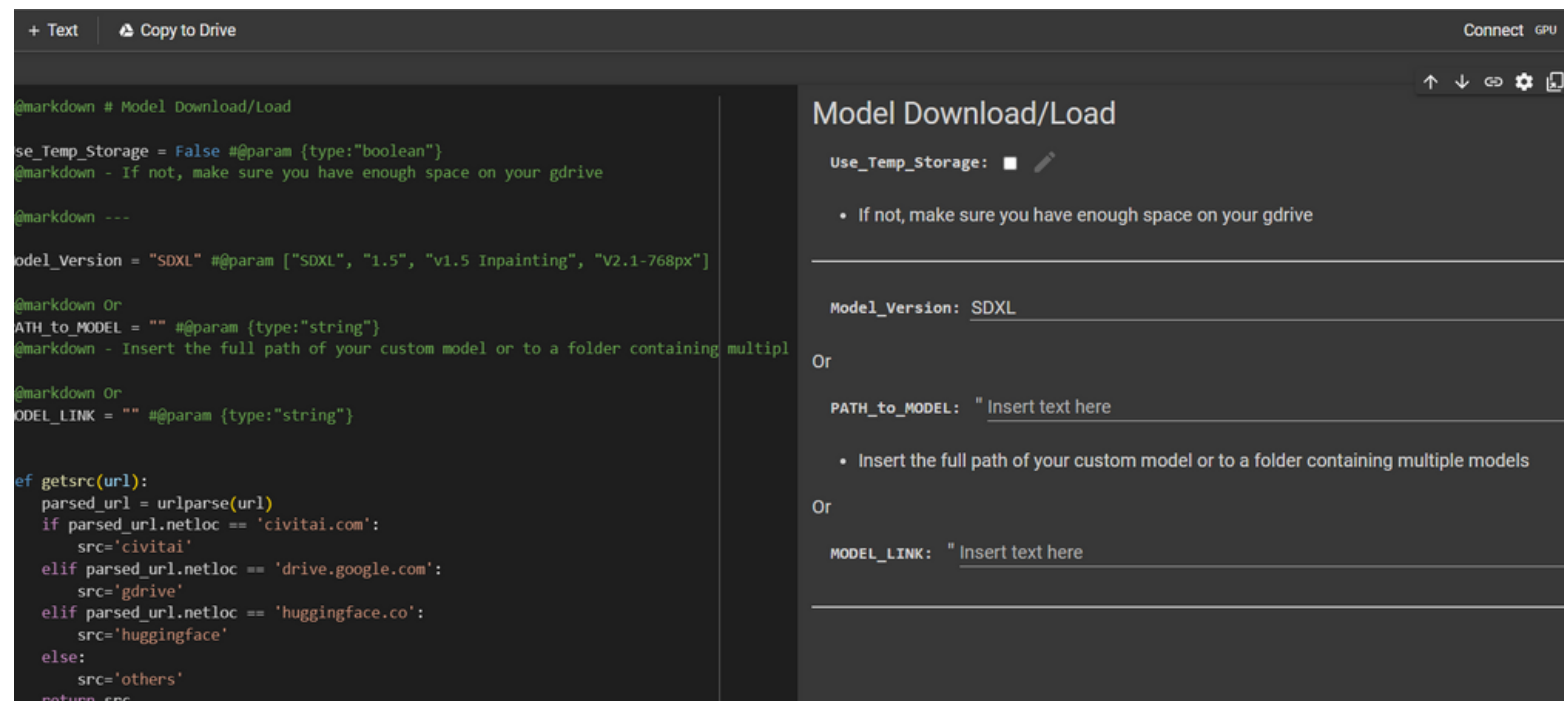
Enter your message…

using OpenAi Assitant API with GPT 3.5 turbo
Model to built a sale chatbot base on information
provided in available file csv

4. Methodology

4.1 Provide a description of the architecture or structure of the AI model that you use

https://colab.research.google.com/github/TheLastBen/fast-stable-diffusion/blob/main/fast_stable_diffusion_AUTOMATIC1111.ipynb

4. Methodologies

4.2 Explain the key components, layers, or modules of the model.

(1) Use Amazon S3 to store input and training data for machine learning models.

(2) Use the Amazon EC2 service to deploy and run machine learning models using bucket data

(3) Install machine learning libraries and tools such as TensorFlow, PyTorch, Keras, or scikit-learn on EC2 virtual servers

(4.1) Train the model using data in S3 and store the trained model back in S3.

(5) Use JavaScript and CSS to build extensions

(4.2)
- The data will be fed to the machine learning model for deployment.
- Get the results returned from the model and create images using the appropriate library tools and store the returned images in Amazon S3 for storage and management.

(7) Data will process data from the extension and send it to EC2.

(6) Use Amazon API Gateway for extensions to receive data from the extension via HTTP requests

Amazon S3

(1) dataset4

S3

data from bucket (2)

Add (3)

Tensorflow
Pytorch
Scikit-learn
....

trained model (4)

Amazon EC2

Build (5)

Extension (app, web,..)

Add (6)

Data from extension

(7)

Amazon API Gateway

4. Methodologies

4.3 Provide the technologies that you intend to use
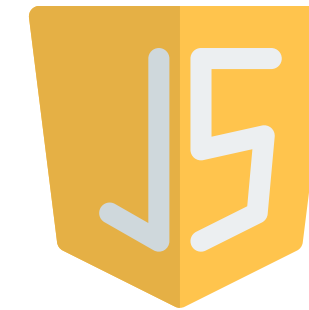
Open AI API

PYthon

Css

Javascript

Amazon EC2
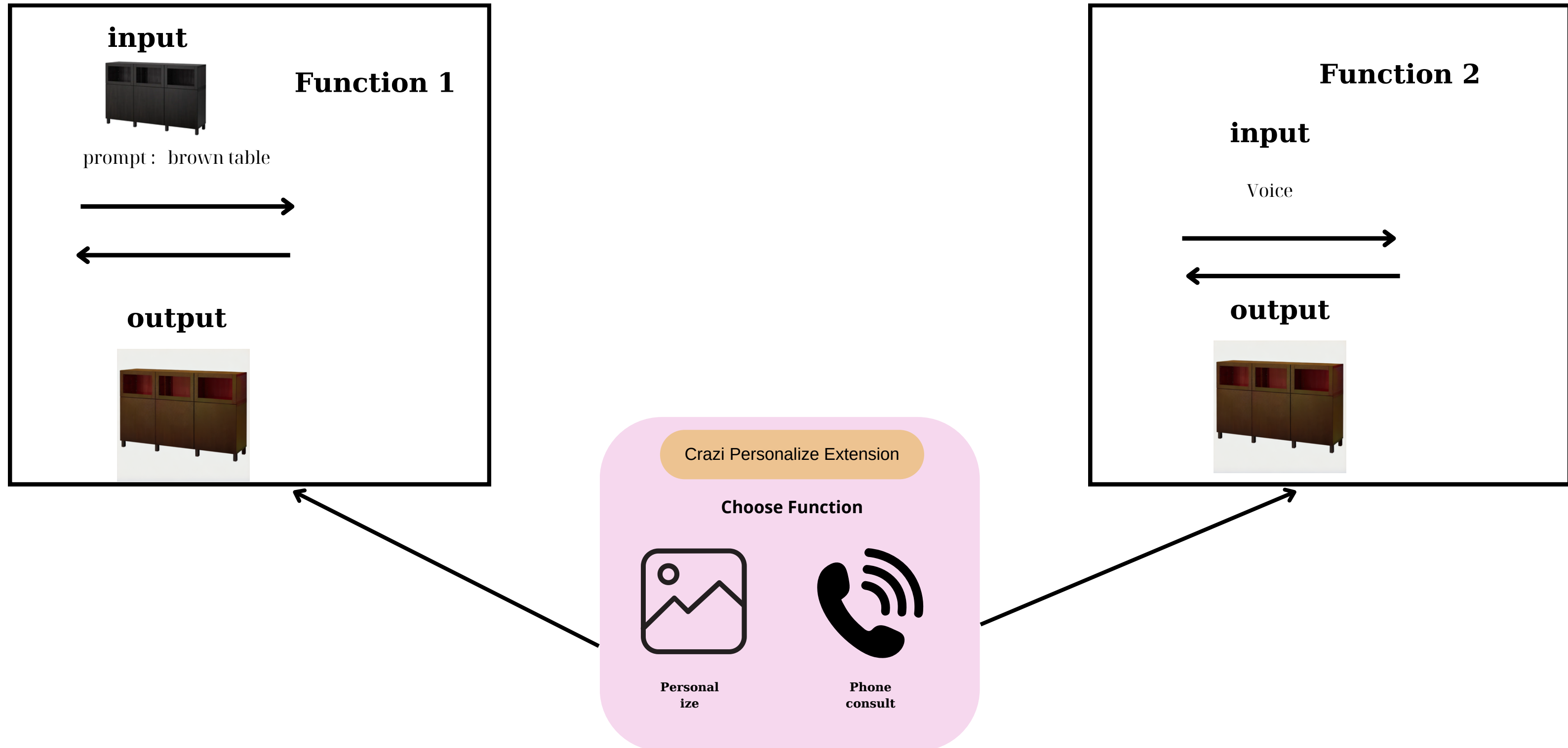
bucket

Diffusion AI

html

chrome dev

Amazon S3

Amazon API Gateway

5. Core Functionality

Outline the primary features and functionalities of the MVP.

6. Performance Metrics

✓ 6.1 Define the key performance metrics that will be used to assess the MVP's success

Click-through Rate (CTR) on Product Recommendations: The percentage of users who click like and dislike on personalized product recommendations.

Conversion Rate to Add to Cart: The percentage of users who add a product to their cart after selecting it.

Conversion Rate to Purchase: The percentage of users who complete a purchase after adding a product to their cart.

Customer Satisfaction Scores (CSAT): The overall satisfaction level of users with the personalized or creative product experience, measured through surveys or feedback forms.

Net Promoter Score (NPS): The likelihood of users recommending the furniture website and its personalized product experience to others.

Product Reviews and Ratings: The average rating and qualitative feedback provided by users on the personalized product experience.

6. Performance Metrics

6.2 Explain how the MVP's performance will be measured and evaluated

feedback evaluted

Sentiment Analysis:
- Use mood analysis to evaluate whether likes and dislikes tend to be accompanied by positive, negative, or neutral opinions. This helps to better understand customers' detailed emotions and opinions.

Analysis by target group:
- Categorize likes and dislikes by specific audience groups or categories to understand customer opinions on different parts of a product or service.

7. Timeline and Roadmap

7.1 Present a timeline or roadmap for the development and deployment of the MVP.

Phase 1: Requirements Gathering and Analysis (prepare at home).
Conduct user research to understand user preferences and pain points.
Define clear goals and objectives for the MVP. Gather and analyze existing data to identify potential personalization opportunities
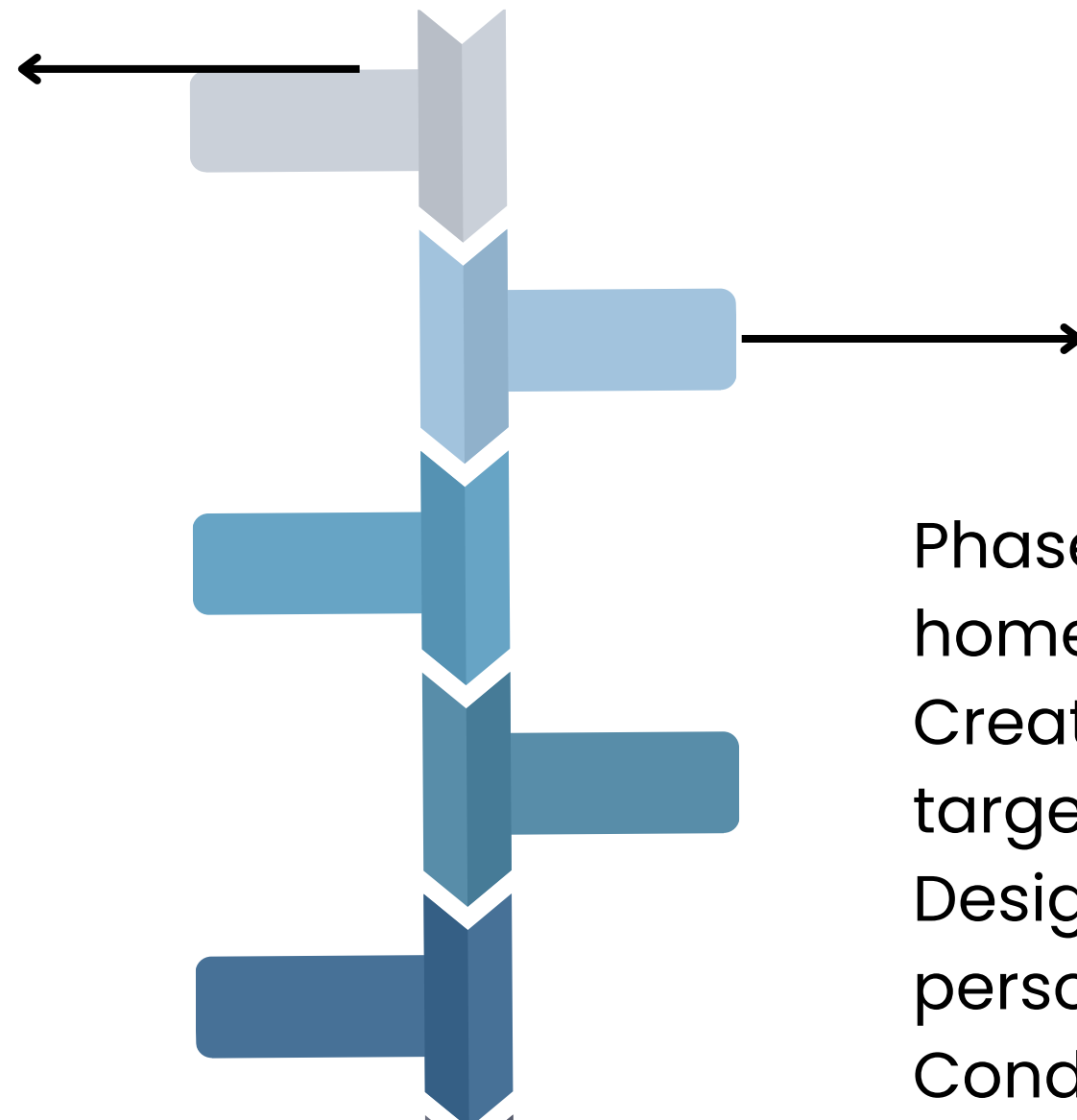
Phase 2: Design and Prototyping (prepare at home)
Create user personas to represent different target user groups
Design wireframes and prototypes of the personalized product experience
Conduct usability testing to gather feedback and refine the designs

7. Timeline and Roadmap

7.1 Present a timeline or roadmap for the development and deployment of the MVP.

Phase 3: *Development (at Datathon Stage 3 first 10 hours)*

- Develop the backend infrastructure to support personalization features
- Integrate personalization algorithms into the product selection process
- Implement creative engagement elements, such as product visualizations or augmented reality experiences
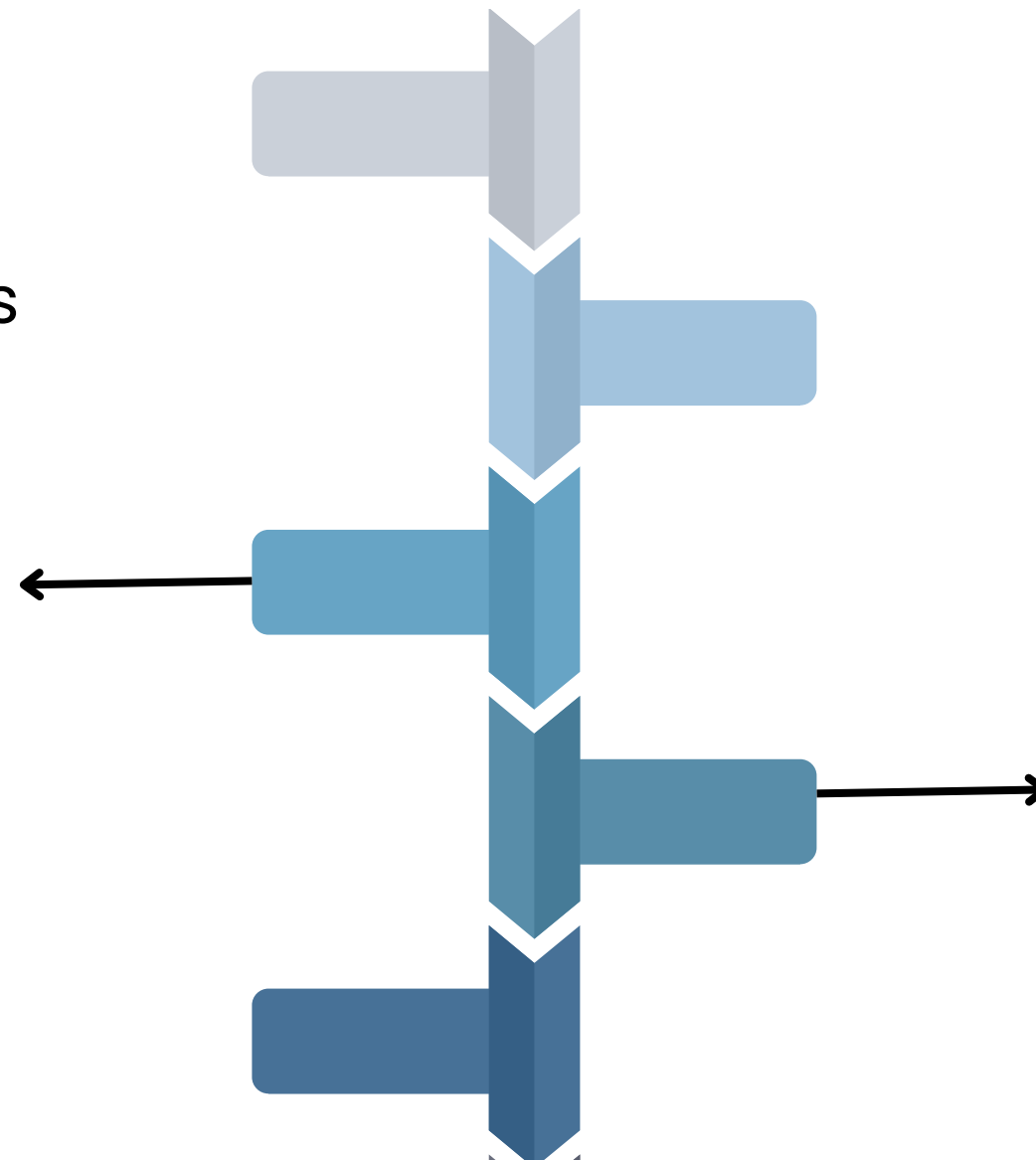
Phase 4: *Deployment and Testing (2 hours)*

- Deploy the MVP to a staging environment for testing
- Conduct A/B testing to compare the personalized experience against the current experience
- Gather user feedback and make final adjustments before full deployment

7. Timeline and Roadmap

7.1 Present a timeline or roadmap for the development and deployment of the MVP.

Phase 5: *Launch and Monitoring (1 hours)*

- Launch the MVP to the public and monitor its performance
- Collect user feedback and usage data to identify areas for improvement
- Continuously iterate on the personalization features and creative engagement elements
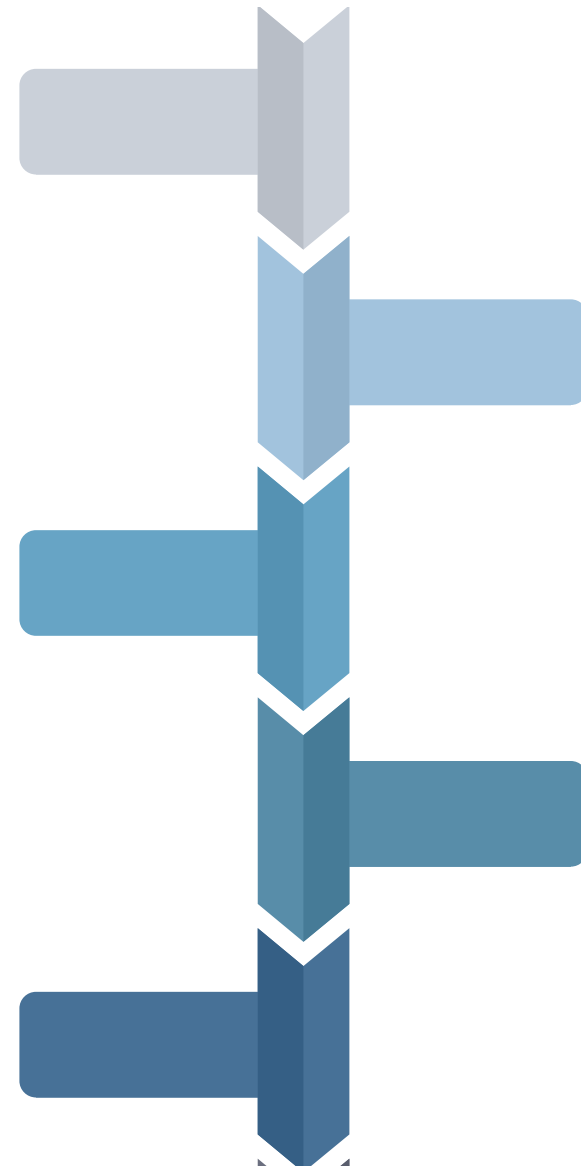
7. Timeline and Roadmap

7.2 Outline the major milestones and deliverables.

0:00————————————————→**10:00**

Develope backend and extension + AI algorism
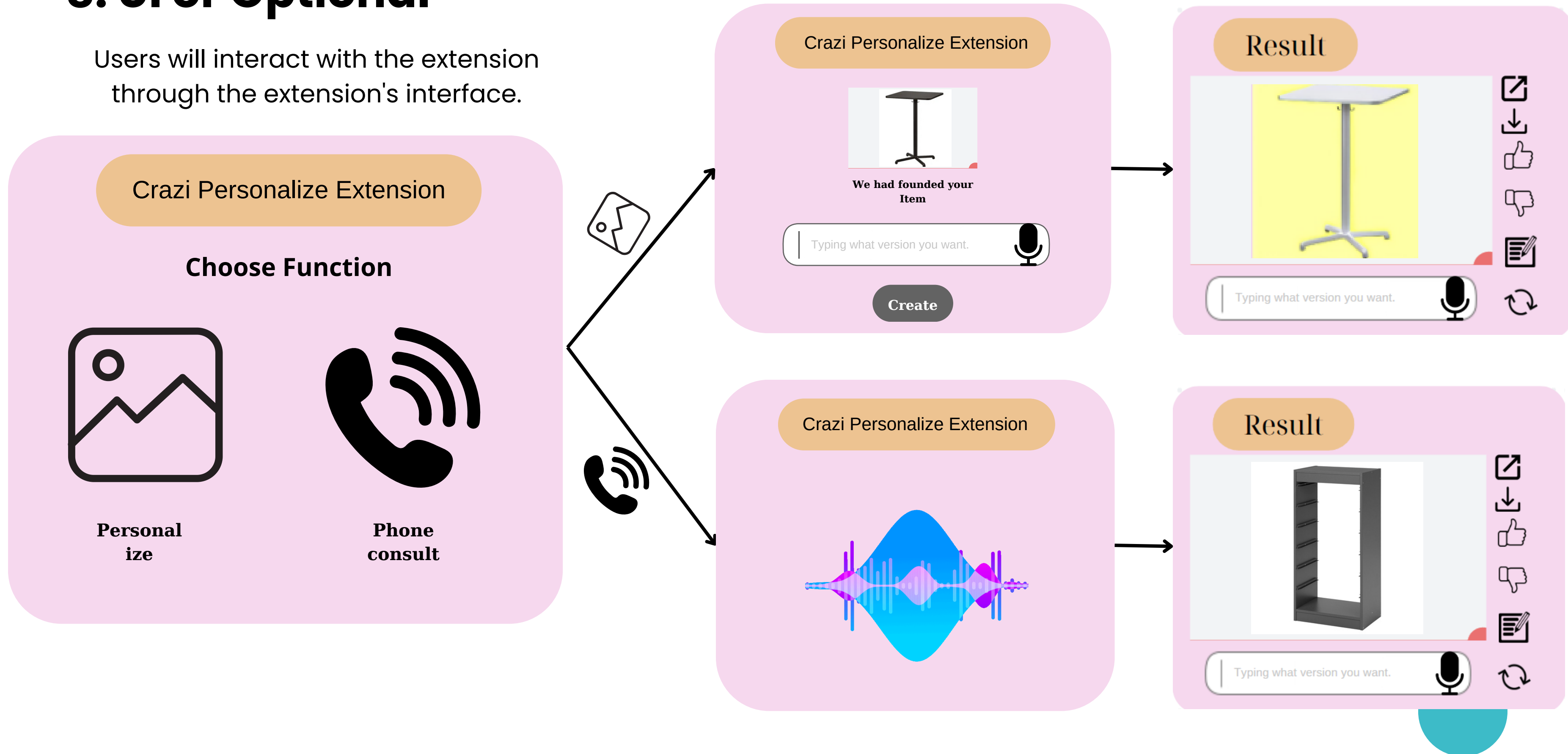
10:00————————————————→**13:00**

Development and testing

13:00————————————————→**14:00**

Launch and Monitoring

8. UI or Optional

Users will interact with the extension through the extension's interface.

Crazi Personalize Extension

Choose Function

Personalize

Phone consult

Crazi Personalize Extension

We had founded your Item

Typing what version you want.

Create

Crazi Personalize Extension

Result

Typing what version you want.

Result

Typing what version you want.

9. Limitations and Future Enhancements

9.1 Acknowledge any limitations or constraints of the MVP

- Limitation of available data to train a strong model.

- Although we already built success model but we don't know to connect path together for example how to import chatbot description to get the information for next step(Diffusion AI) may by just because we built them independently, and we need time to process problems.

- Chatbot we built not always connect successfully with the data source we provided, in also not always return the result we expect.

- The fact the biggest problem of us is limitation of time processing, in normal we need about 3 minute to create a Design.

9. Limitations and Future Enhancements

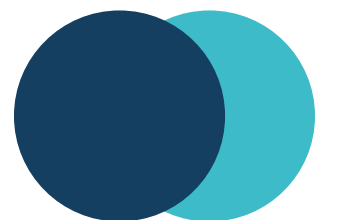9.2 Discuss potential future enhancements or additional features that could be incorporated.

Defusion AI implementation will be a trend for expensive sale products. With providing personalized experiences for customers, this technology is a new field that needs to be explored better to improve the quality of service.

Our team's want to develope:

1. The chat bot function QR personalize can show off address and content of product .

2. The development function supervises the learning function in order to improve requests after getting custom data.

3. The development function put products in the 3D simulator room as an extension.

4. Determine the product they could make and suggest a price for a new product; create or suggest a similar product after personalization for their customers.

10. Conclusion

In conclusion, the Minimum Viable Product (MVP) presented here successfully addresses the first identified problem on the furniture website. The initial challenge revolved around users' dissatisfaction with the lack of a personalized experience when selecting a product. Through the implementation of the MVP, users can now enjoy a more tailored and engaging journey, ensuring that their preferences are seamlessly integrated into the product experience. This solution not only enhances user satisfaction but also lays the foundation for further improvements and innovations to elevate the overall user experience on the platform.

THANK YOU
FOR YOUR ATTENTION