



# AI LEARNING WEBSITE

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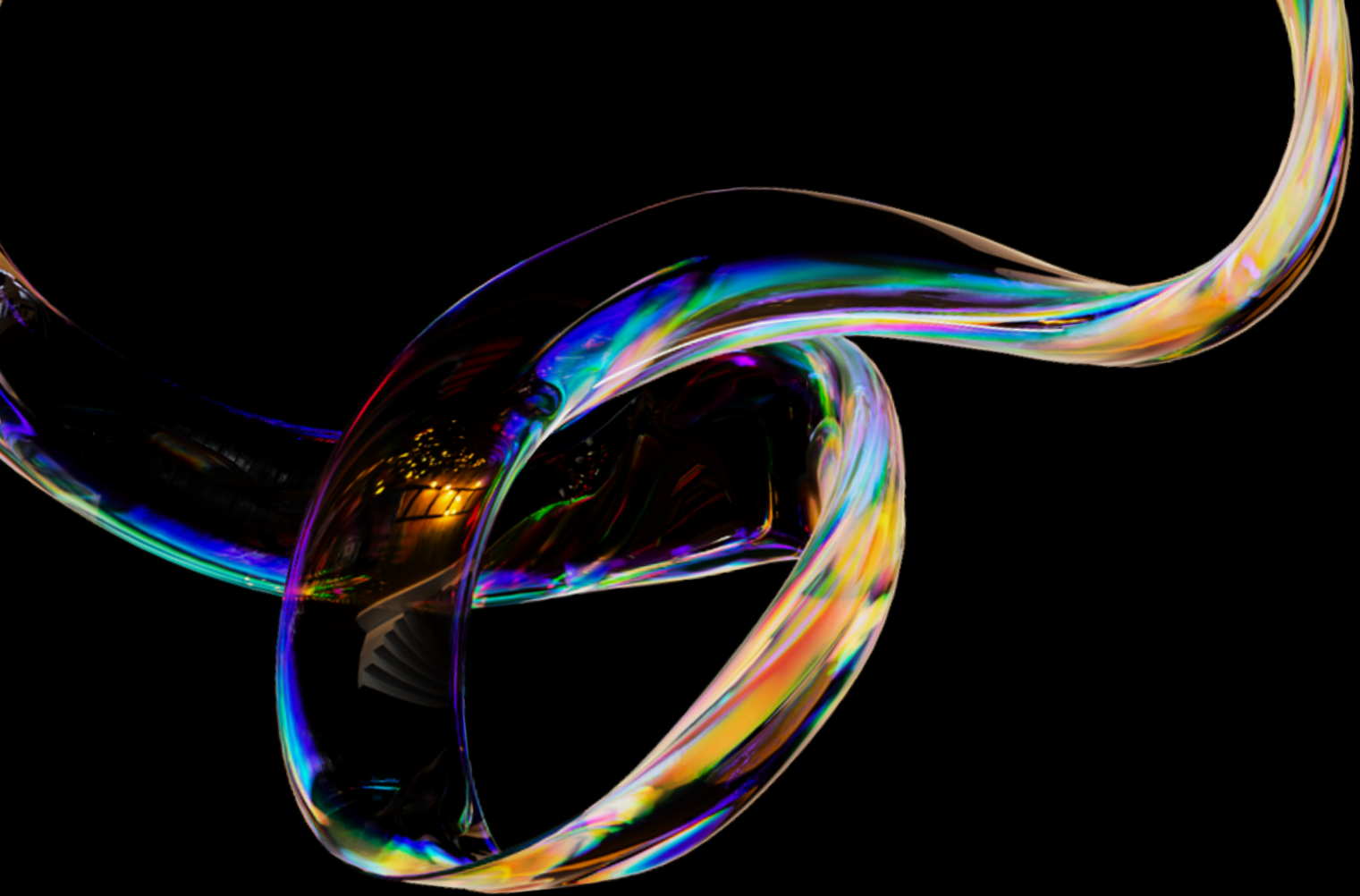


# PROBLEM STATEMENT

- Lack of Awareness of Individual Learning Methods (Chen & Wang, 2020)
- Inaccurate Domain-Specific Responses from AI Chatbot (Davis, 2024)
- Challenges in Implementing AI-Driven Personalized Learnings (Evanick, 2024)

## DIFFERENT LEARNING METHODS

- Learning influenced by cognitive differences
  - high working memory capacity : structured methods
  - lower capacity : visual aids or simplified content  
(Sweller, 1988; Mayer, 2009).
- Traditional text-heavy textbooks
  - primary resource in many schools, leaving approximately 60% of students, particularly visual and auditory learners, disengaged and struggling to stay attentive  
(Neo & Neo, 2004).



# OUR SOLUTION

## Explore your learning method now!

Answer the questions below based on the material given.

### Text Method

Volcanoes are openings in Earth's surface where molten rock, ash, and gases escape from beneath the ground. They can be found on land and underwater. Some volcanoes are active and erupt frequently, while others are dormant or extinct. Volcanic eruptions can be extremely powerful, destroying nearby areas but also creating new land and rich soil for plants to grow.



AI Assistant

Draw mind map Unit 2

22:41



Mind Map of Unit 2 has been drawn.

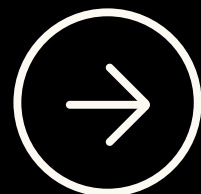


Type your message...





# OUR SOLUTION



## **Quiz to test learning method**

Recommends learning method //  
Learning method sent to chatbot to answer questions based on learning method



## **Feedback in text / mindmap / audio version**

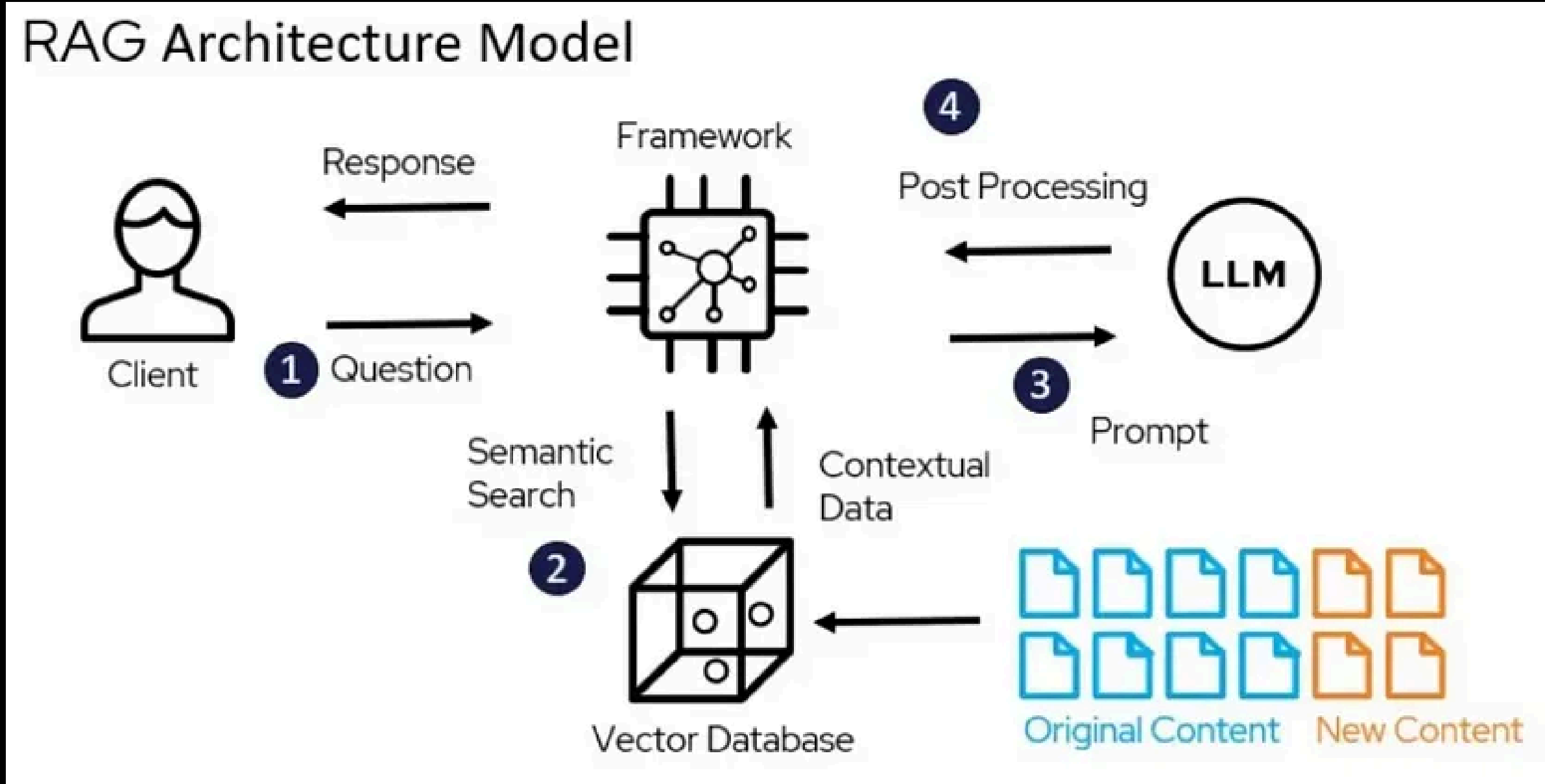
To cater different learning methods



## **Domain-Specific Responses from AI Chatbots**



## **Quiz for Revision**

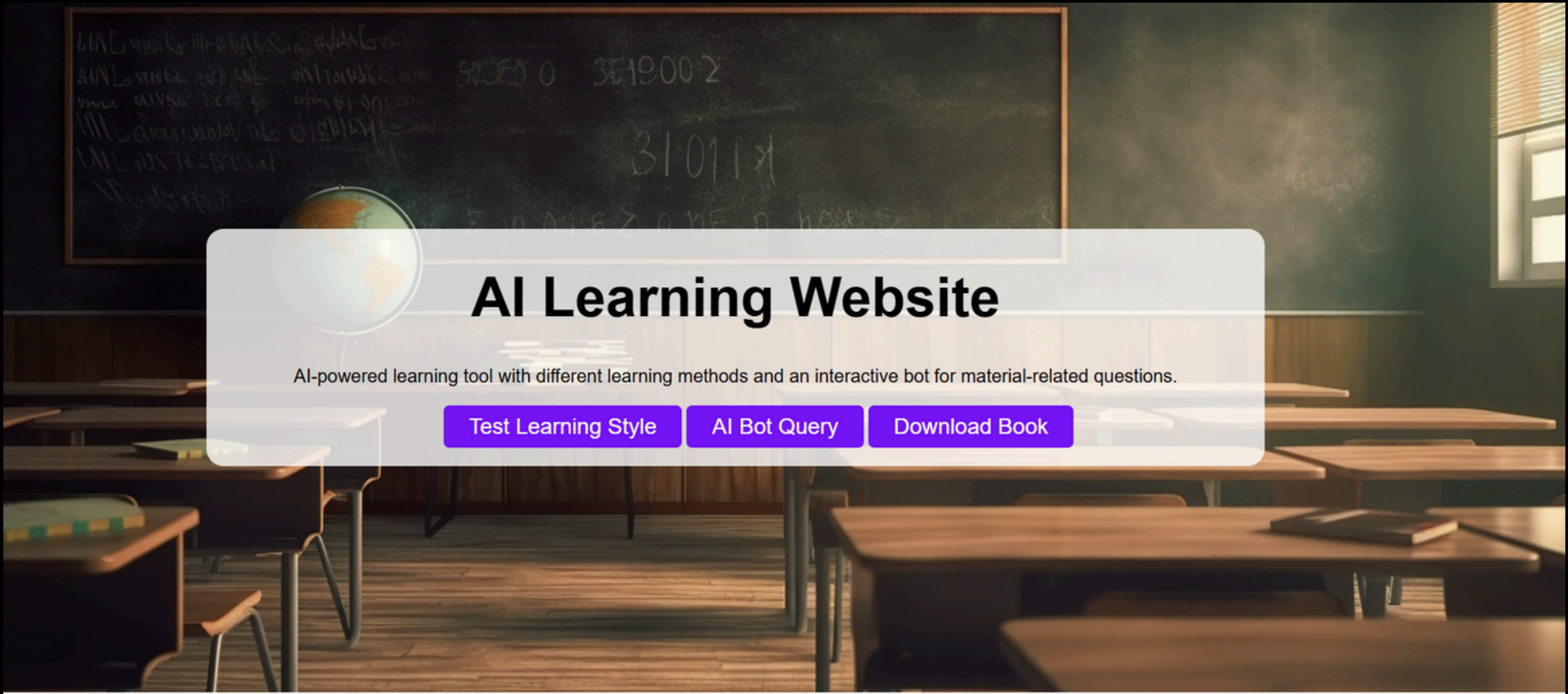


# LLAMA 3.1 & RAG MODEL



# WHY LLAMA?

- Open Source and Customizability
- Cost-Effectiveness
- Privacy and Security
- Flexibility

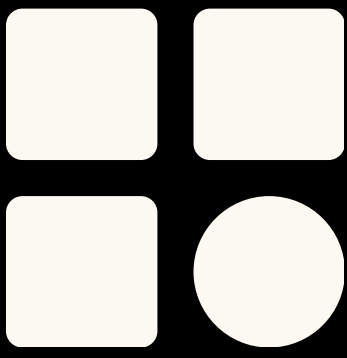


# AI Learning Website

AI-powered learning tool with different learning methods and an interactive bot for material-related questions.

- [Test Learning Style](#)
- [AI Bot Query](#)
- [Download Book](#)

# DEMO



Click the icon to access source code folder

# Bibliography

Chen, S. Y., & Wang, J.-H. (2020). Individual differences and personalized learning: a review and appraisal. *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-020-00753-4>

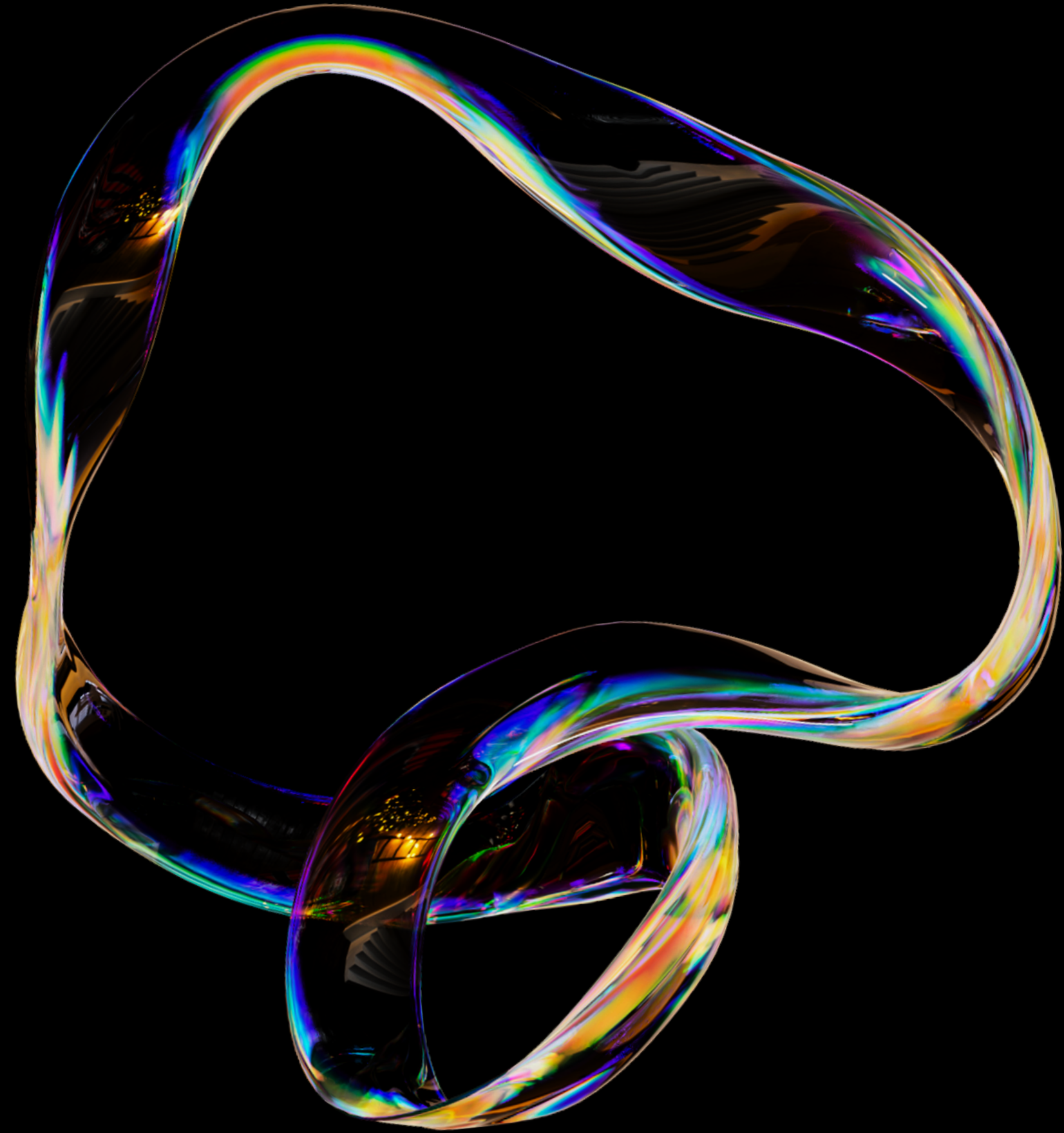
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**THANK  
YOU**