A woman with dark hair and red lips is wearing a VR headset. The headset has large, glowing blue eyes on the lenses. She is looking slightly to the left. The background is a blurred indoor setting.

# AI POWERED BLOCKCHAIN TUTOR

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# OBJECTIVES



Blockchain is a rapidly evolving field, and staying updated while learning in a personalized, adaptive manner is challenging.

This AI tutor solves the issue by dynamically adjusting content, based on Retrieval-Augmented Generation (RAG) and multi-agent collaboration.

The project aims to create an AI-powered blockchain tutor to provide personalized, up-to-date blockchain lessons, real-time feedback, and custom quizzes.

# DELIVERABLES

- **Blockchain Knowledge Retrieval**

Use RAG to ensure up-to-date blockchain information is used in lessons and answers.

- **Personalized Lessons**

Dynamically generated lessons based on the student's learning progress and pace.

- **Custom Quiz Generation**

Generate quizzes tailored to the student's progress.

- **Query Answering & Real-Time Feedback**

Real-time answers to blockchain-related questions and real time feedback to improve learning.

- **MultiModality**

Creating text to Speech or adding Images



# MULTI-AGENT SYSTEM DESIGN

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- **Knowledge Retrieval Agent**

Fetches relevant & accurate blockchain information from source

- **Lesson Generation Agent**

Creates personalized lessons using the retrieved knowledge

- **Quiz Creation Agent**

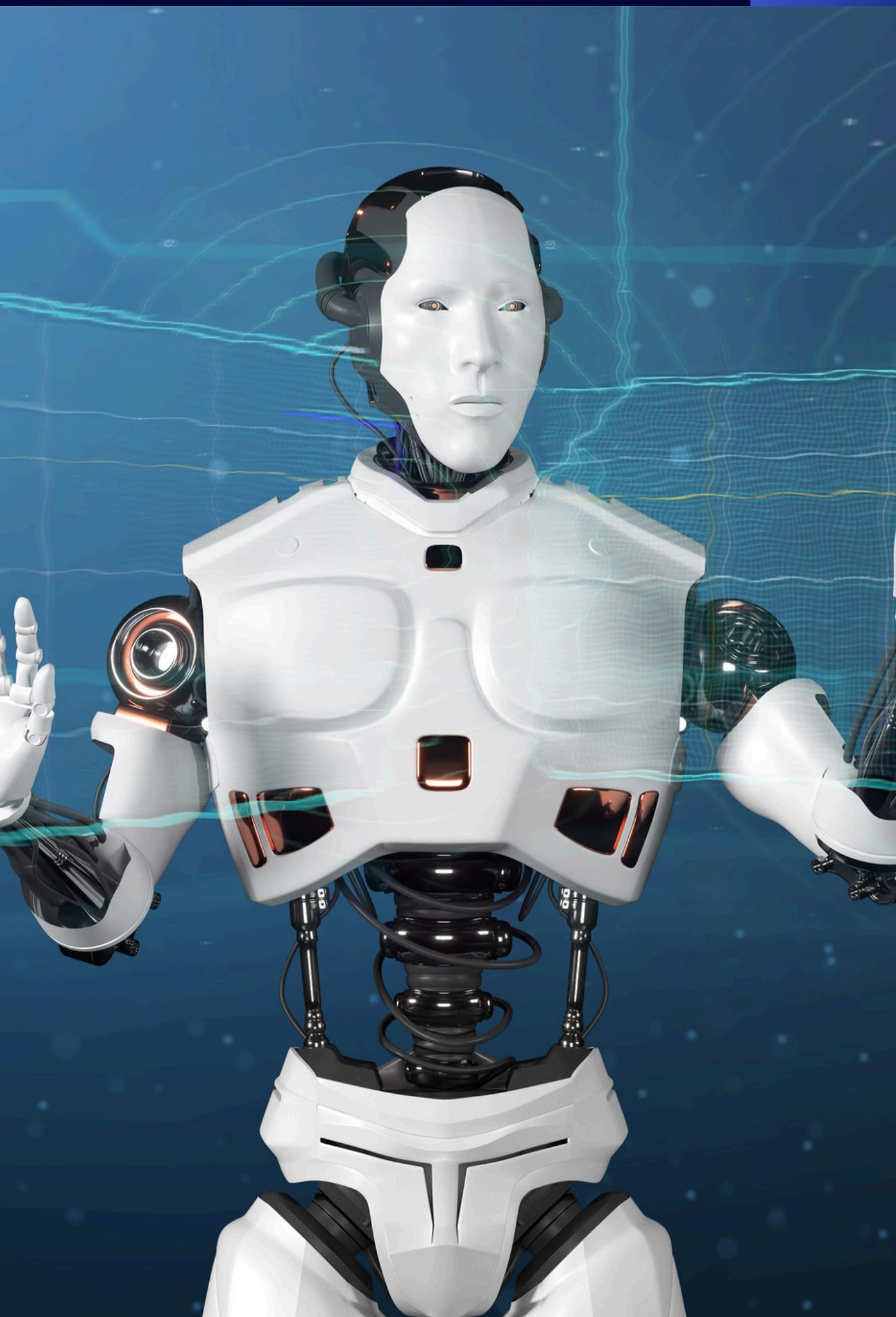
Generates custom quizzes based on the lesson topics

- **Query Answering Agent**

Responds to queries by retrieving information and generating accurate answers

- **Feedback Agent**

Analyzes the student's performance and provides feedback





# TOOLS

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01

**AutoGen:** To implement and manage multi-agent workflows

02

**Streamlit:** For the frontend interface of project

03

**API:** For real-time blockchain knowledge retrieval

04

**LLM:** Used for generating lessons, quizzes, and answering queries.

05

**Multi-Agent Systems:** For collaborative task completion between agents.



USER 1



USER 2

# USER-INTERACTION

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## Streamlit interface

- Input fields for queries
- Lesson summaries
- Quizzes
- Feedback based on quiz performance

# TECHNOLOGY STACK

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- Streamlit/Chainlit
- AutoGen(Crew.ai)
- API
- Large Language Models/LocalLLM





# THANK YOU