THE TIMELESS CHAMBER: A VIRTUAL REALITY ESCAPE ROOM ENHANCING EDUCATIONAL EXPERIENCES

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THE PROBLEM WITH TRADITIONAL LEARNING

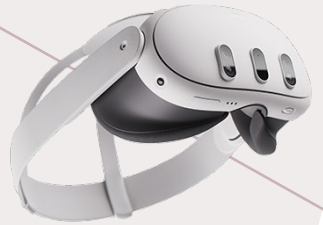
- 📉 Low student engagement
- 🧩 Need for interactive
- 🥽 VR as a potential solution

SERIOUS GAMES AND EDUCATION

🎮 **Serious Games = Learning + Fun**

- Game-based learning improves engagement
- Simulations help with skill development
- Real-world application of knowledge

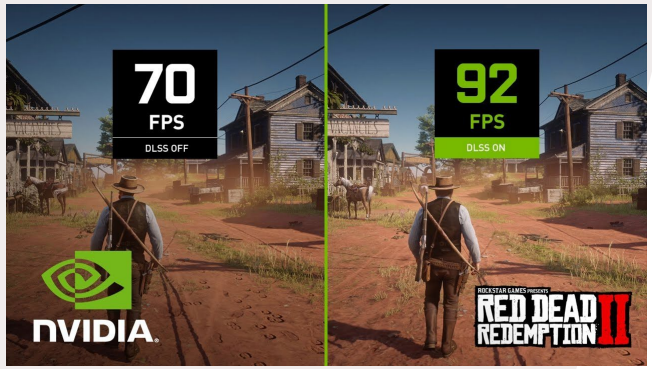
UNREAL ENGINE 5 FOR VR DEVELOPMENT

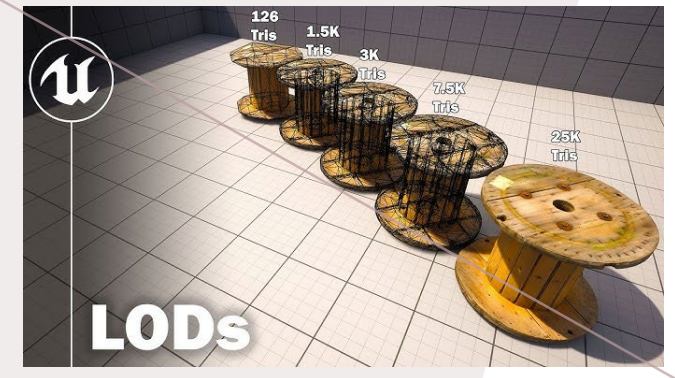


- **Real-time Rendering & Optimization**
- **Static vs. Dynamic Lighting**
- **Nanite for High-Resolution Assets**

UNREAL ENGINE

UNREAL ENGINE 5 FOR VR DEVELOPMENT





- **LOD (Levels of Detail) & Culling Techniques**
- **Deferred vs. Forward Shading**
- **Deep Learning Super Sampling (DLSS) for Performance**

WHAT IS "THE TIMELESS CHAMBER"?

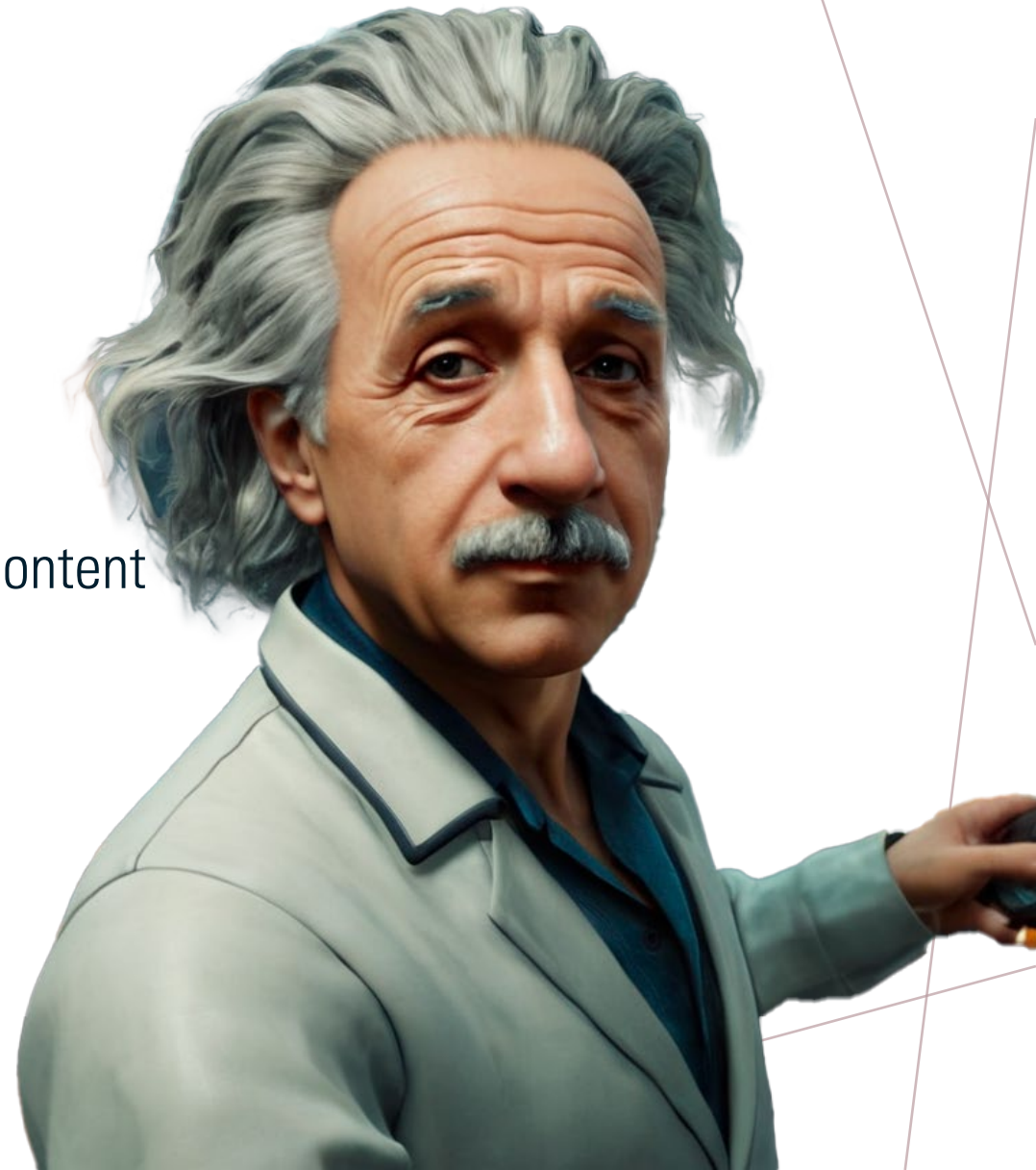
- **VR Escape Room** for STEM, History & Art
- Players solve puzzles guided by historical figures
- Immersive learning experience.

HOW IT WORKS?

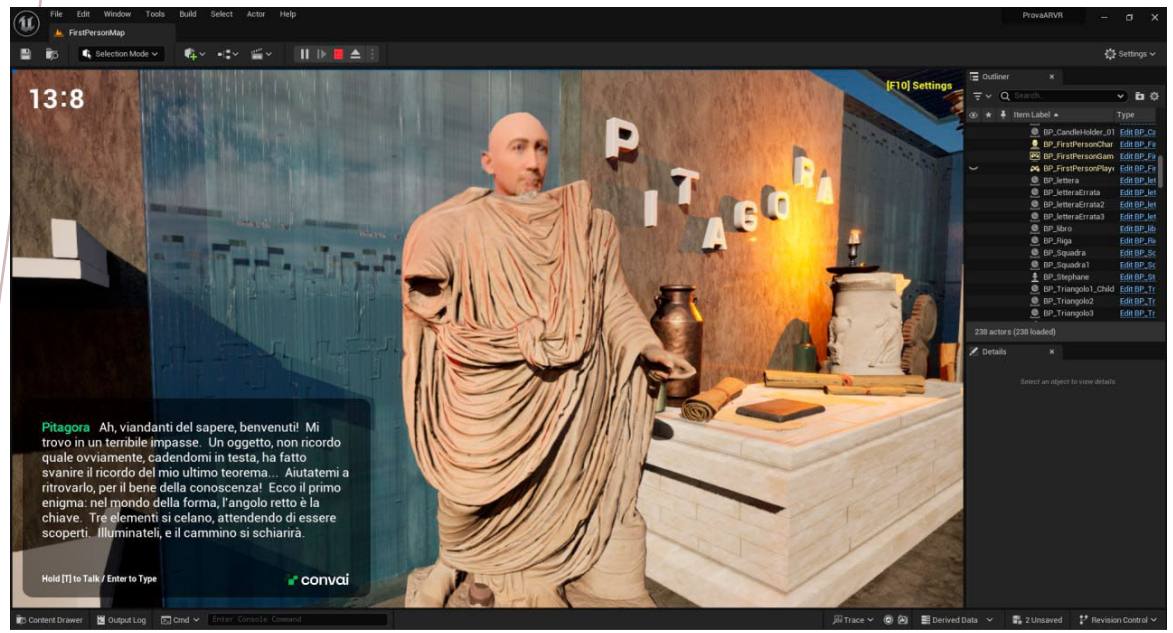
🎭 **Interactive storytelling** with historical figures

🧩 **Puzzle-solving challenges** linked to educational content

⏳ **Time-based escape mechanics** for engagement



KEY TECHNOLOGIES USED



🛠 **Unreal Engine 5** – High-quality VR rendering

🧠 **Conversational AI** – Realistic NPC interactions

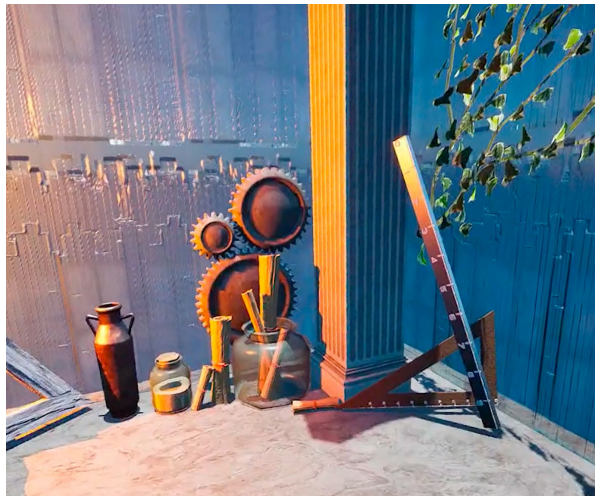
🎮 **Serious Games** – Learning through immersive gameplay

PYTHAGORAS'S DEMO LEVEL

#1 Identification of Right Triangles

#2 Cube Puzzle

#3 Search for the Book



#4 Discovery of the Measuring Tool

#5 Calculation of the Hypotenuse

EDUCATIONAL BENEFITS

📈 **Increases engagement** and motivation

💡 **Hands-on problem-solving** in STEM subjects

🎭 **Brings history to life** through interactive storytelling

CHALLENGES & FUTURE IMPROVEMENTS

- Reimagining Learning through VR
- Engagement through Gameplay & Interaction
- Future Enhancements: AI & Real-Time Feedback
- Expanding Themes & Improving Realism
- Potential for a More Interactive Education

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Dibris

3D LAB FACTORY

THANK YOU FOR YOUR ATTENTION

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