Integrating **Simulation** and **Storytelling** in **Education-based** Virtual reality experiences

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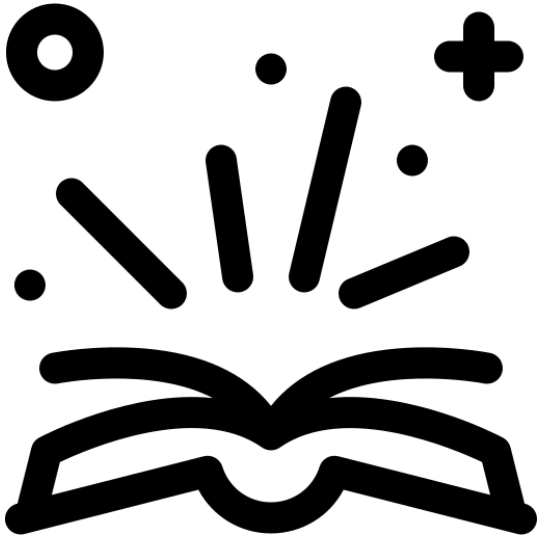
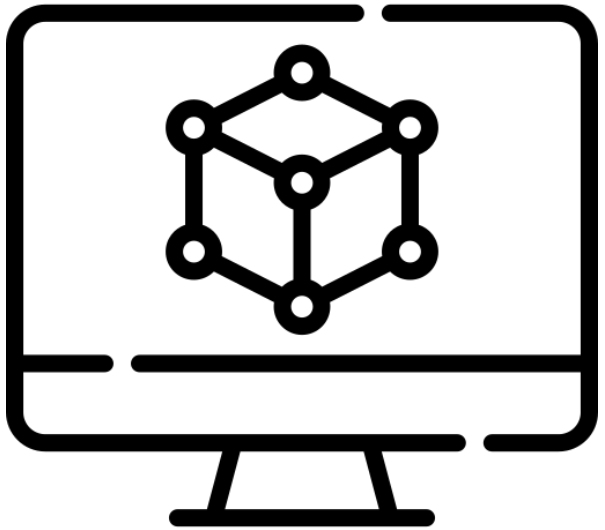
Overview

This project's inspiration came from the idea of melding simulation and storytelling to create a VR experience that is both educational and fun. Gamification of education, which is being incorporated into many aspects of learning, is a growing trend, and combining the two genres in a virtual setting could enhance the user's experience and effectiveness in such learning environments.





Case Study

Using VR for storytelling and education

How does VR enhance **Storytelling**?

How does VR effect a **User's Immersion and engagement**?

Is VR effective in **Education**?

When is VR used in **Media for learning**?

Why Virtual Reality?

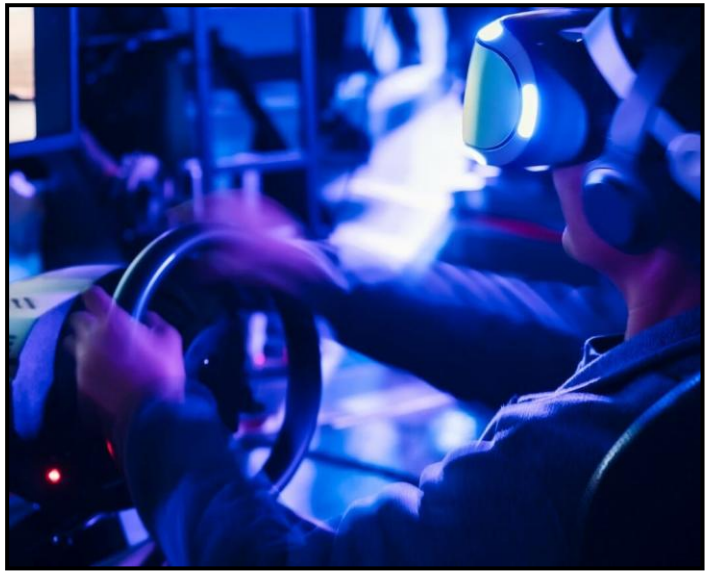
Virtual reality holds the top spot for technology that immerses the human perception into a virtual space. VR technology bring's reality into the digital world, along with many unique experiences to be explored. VR has been used across all industries in numerous ways. From education and training simulations, to fantasy games, to virtual chat rooms.

Virtual Reality in Gaming and Storytelling

VR is used in the gaming industry to enhance immersion and create a unique experience in unreal settings and scenario’s

Virtual Reality in Gaming and Storytelling

VR popularity boomed with its incorporation into gaming, which complements the technologies' ability to fully immerse its user into the digital world, stimulating the human mind's ambition to adventure and experiment. VR games such as Lone Echo, which are driven by their storytelling, show the impact on immersion the tech can offer. Along with this, VR can heighten the emotional responses of user's due to the its realism factor.



Virtual Reality in education

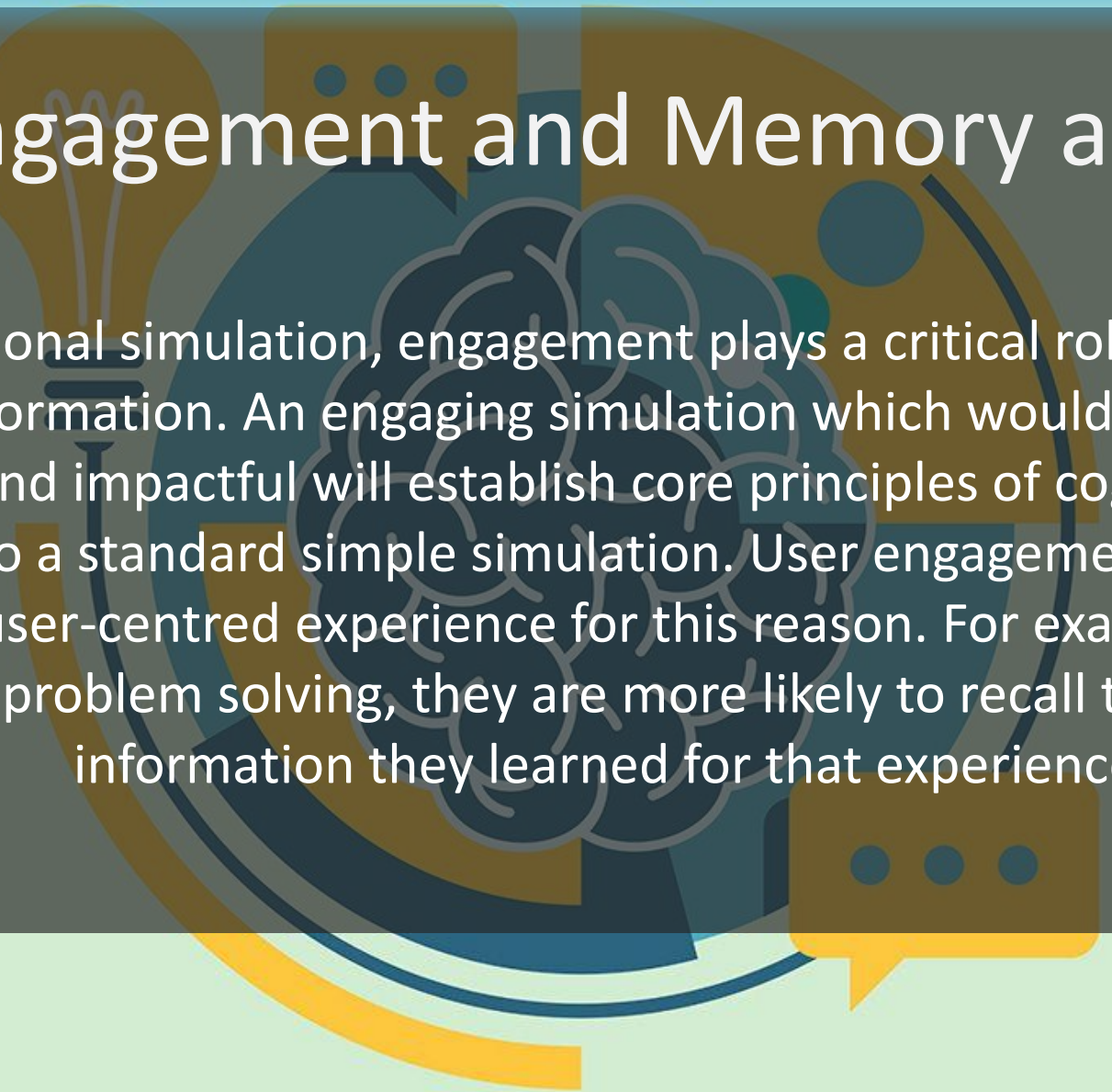
Many fields are embracing VR tech into their training programs due to the safety, ease of use effectiveness

Virtual Reality in education

VR has immense potential in its usability in the educational field, as stated, as it can bring a user into an immersive 3D environment crafted with the goal of teaching without the risk of safety and reduce the need of learning materials. Great examples that showcase the potential of VR in education is training simulators, such as surgeon sim, which is being used to teach the next generation of surgeon's today due to its availability, ease of use and effectivity.

With the examples shown, VR offers a powerful medium for transforming complex or even impossible scenarios into immersive digital experiences. This technology can effectively create impactful educational simulations and interactive learning environments.

How Engagement and Memory are linked



For an educational simulation, engagement plays a critical role on how the user process information. An engaging simulation which would be much more captivating and impactful will establish core principles of cognitive processes opposed to a standard simple simulation. User engagement is key when developing a user-centred experience for this reason. For example, when a user is actively problem solving, they are more likely to recall the events and information they learned for that experience

Conclusion

Developing an education simulation in VR would require a method in which the user can stay active with high engagement. To do this storytelling and simulation can play a great role in captivating users, while being useful to the educational experiences core lessons.


No Bound
A VR Sandbox about creating your own Solar System

Explanation of Game

No Bound will be an educational simulation designed to teach those with little knowledge about the solar system core principles of how a solar system works, the implications of placement in the system and how life develops on planets.

No Bound will let its user manage and develop solar systems in a simplistic way, while being both educational and story driven, using a unique set of tools and a companion, Sol!

Sol

To assist users in my simulation, I have developed Sol, a small ray of hope for your solar systems. Sol can give hints and clue to what the user must do to complete tasks. Sol also is used for driving the story and engagement of the player.

Previs

Creation

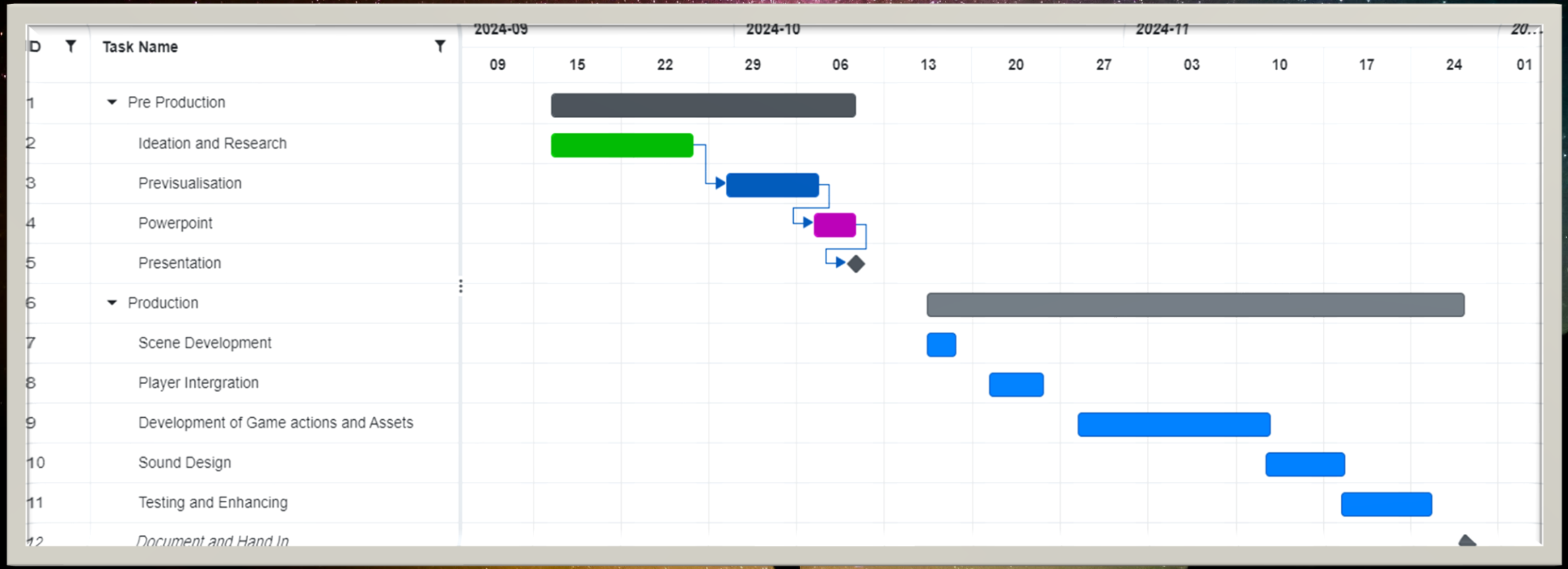
This game will be developed in Unreal engine, alongside Blender and suitable Adobe software such as Photoshop.

- Unreal Engine (Handle Logic, VR space and Game engine)
- Blender (Handle Modelling and Animation)
- Photoshop (Materials, images and UI)

Tech Requirements

UNREAL
ENGINE

Development Timeframe




Thanks for Listening