

Oceanic Institute Virtual Reality Tour: 360-Degree Exploration



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MS Plan B, Spring 2023

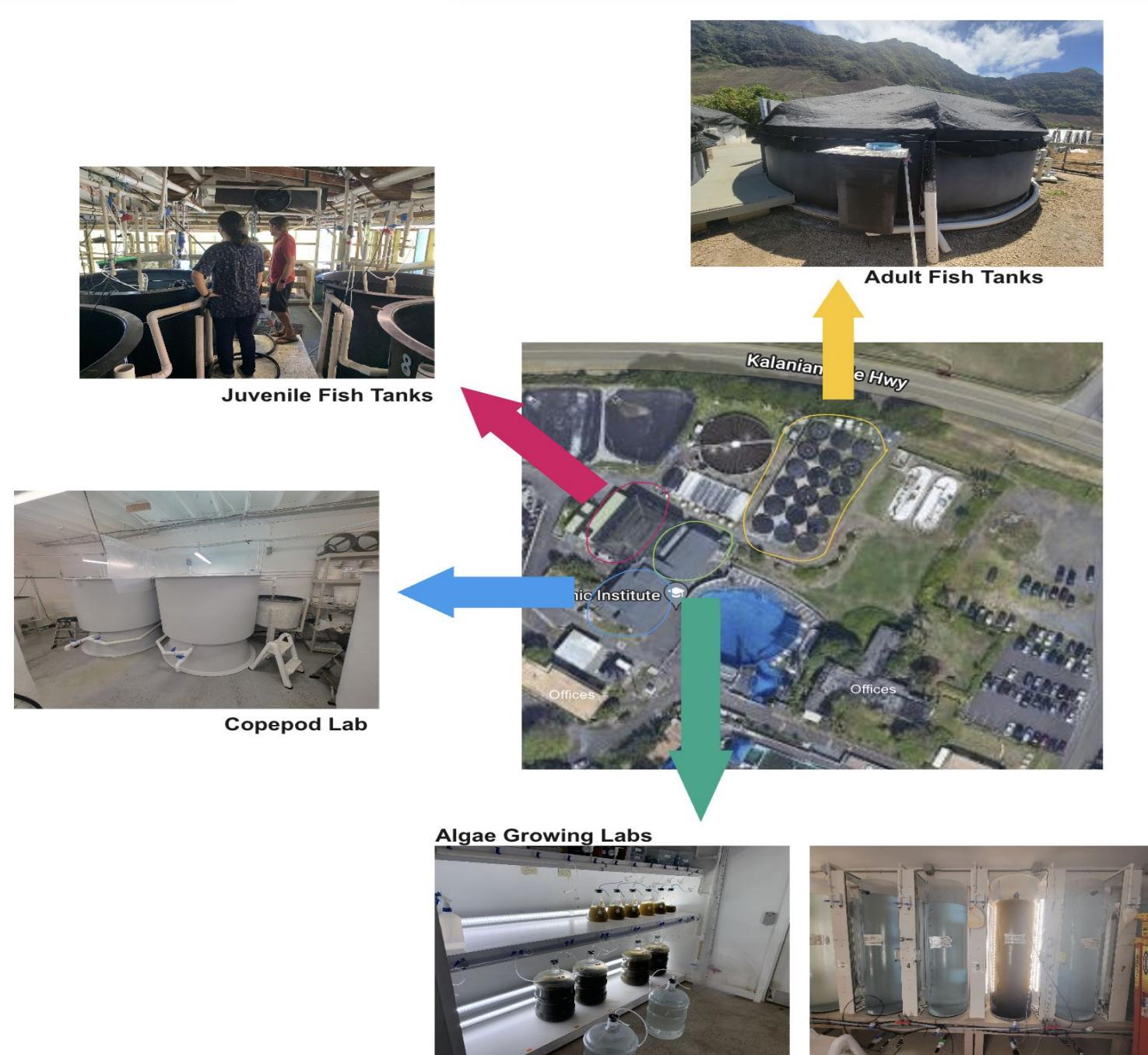
Introduction

Explore the fascinating world of marine science and aquaculture through an immersive and interactive virtual reality (VR) experience developed for the Oceanic Institute. This cutting-edge project is designed to educate and inspire users by introducing them to oceanic research, conservation efforts, and the vital work conducted at the Oceanic Institute.



Motivation

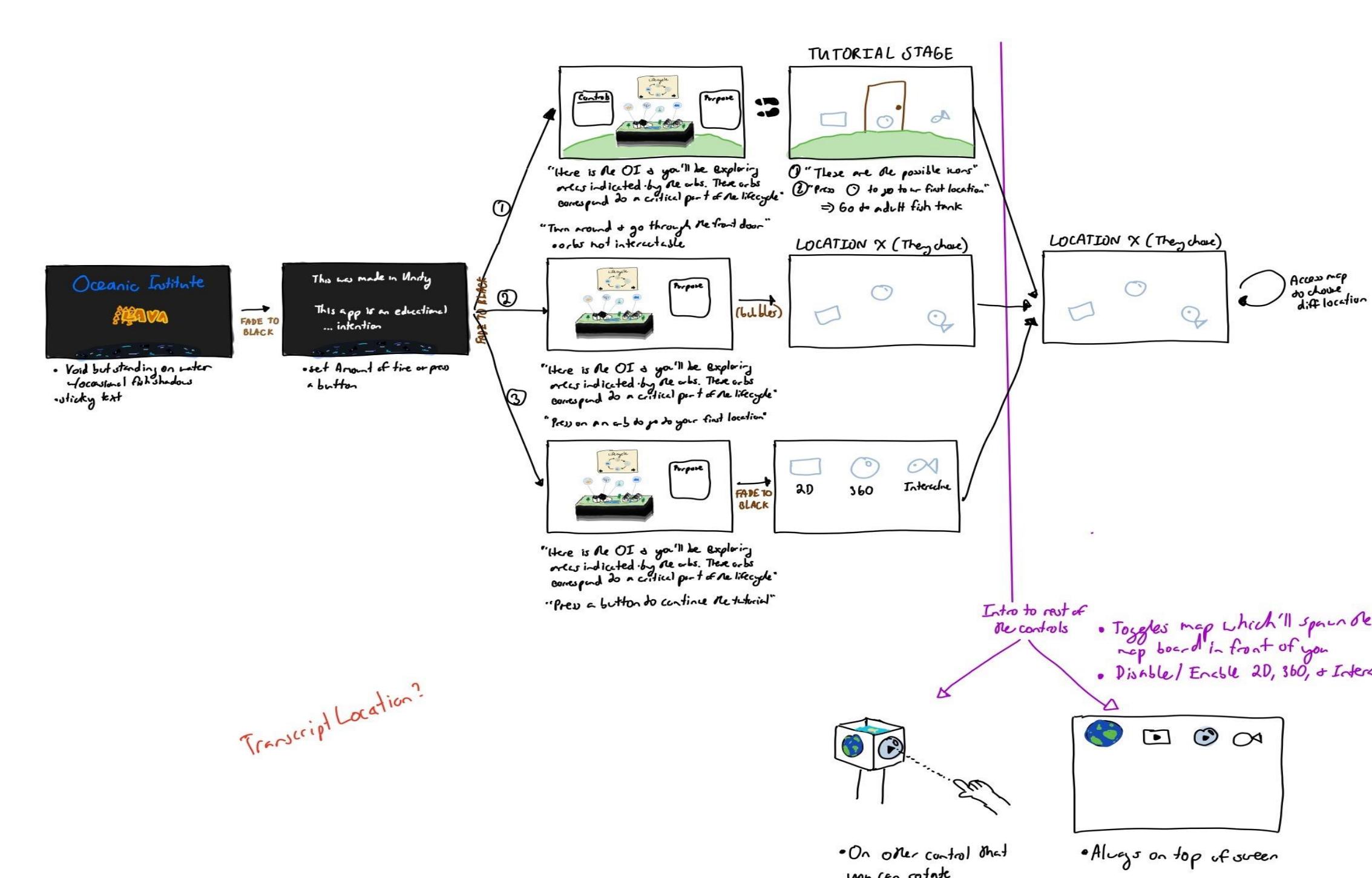
The motivation behind this project is to harness the power of VR technology to engage students, educators, researchers, and the general public in the exploration of marine ecosystems. By fostering a deeper understanding of marine life, aquaculture, and the research conducted at the Oceanic Institute, this project aims to inspire curiosity and promote environmental conservation.



Methodology

Our VR experience is structured into three scene types: General Point of View stationary 360-degree videos, event videos, and interactive scenes. The experience begins in the map room, a central hub created using a 3D model of the institute. Users can access four primary areas from the map room: Algae Lab, Copepod Lab, Adult Tanks, and Hatchery.

The development of the Oceanic Institute VR experience encompassed a multifaceted approach, integrating 360-degree video capture, interactive VR scenes, and user experience considerations. The process involved a planning phase, followed by 360-degree video capture and editing, VR environment development, interactive scene creation, functionality implementation, UI and UX refinement, and testing and optimization. Feedback from stakeholders, students, educators, and practitioners informed the final adjustments and polish, ensuring the experience was ready for deployment in educational and outreach settings.



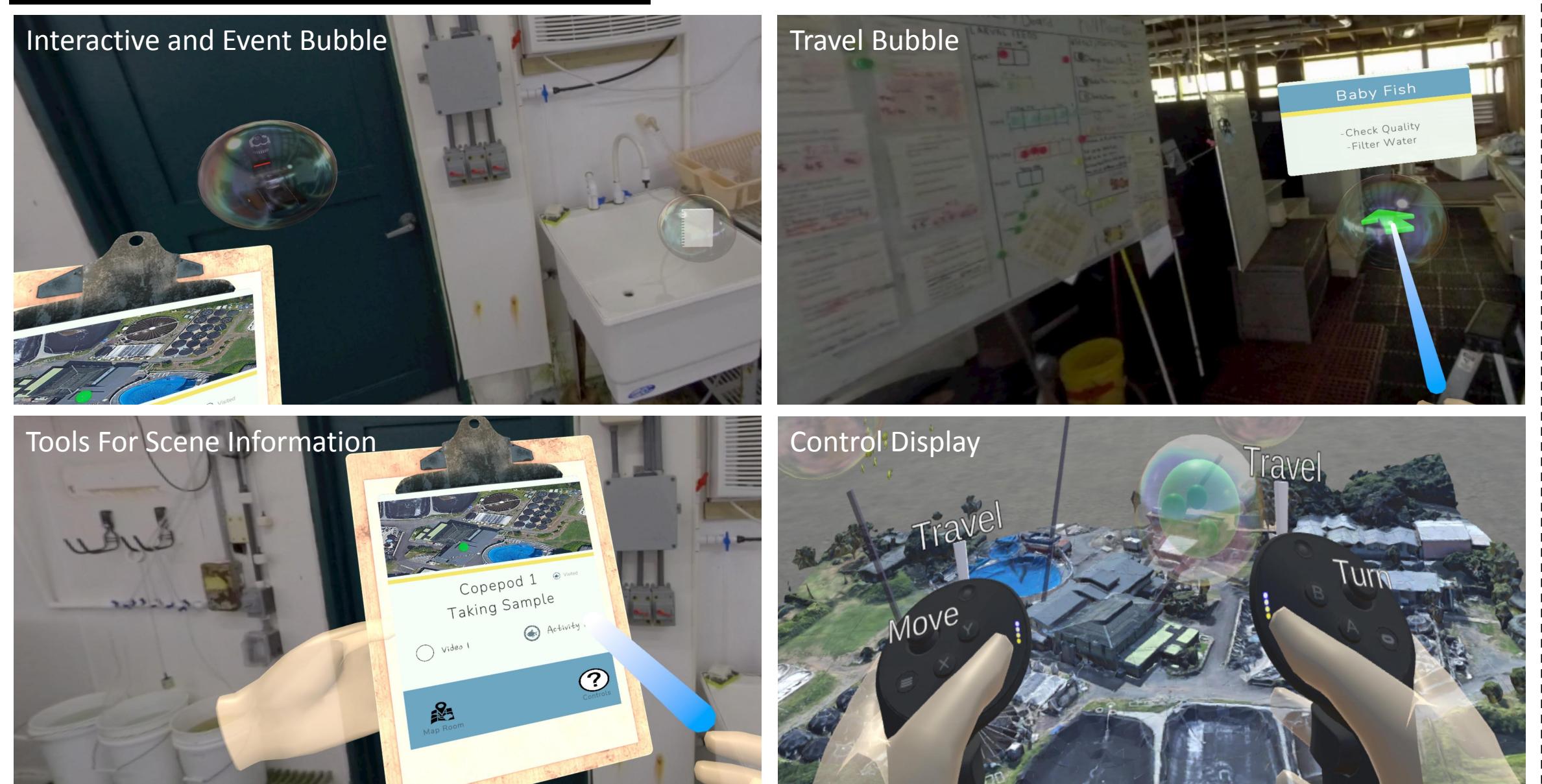
360 Degree Video



Interactive Scene

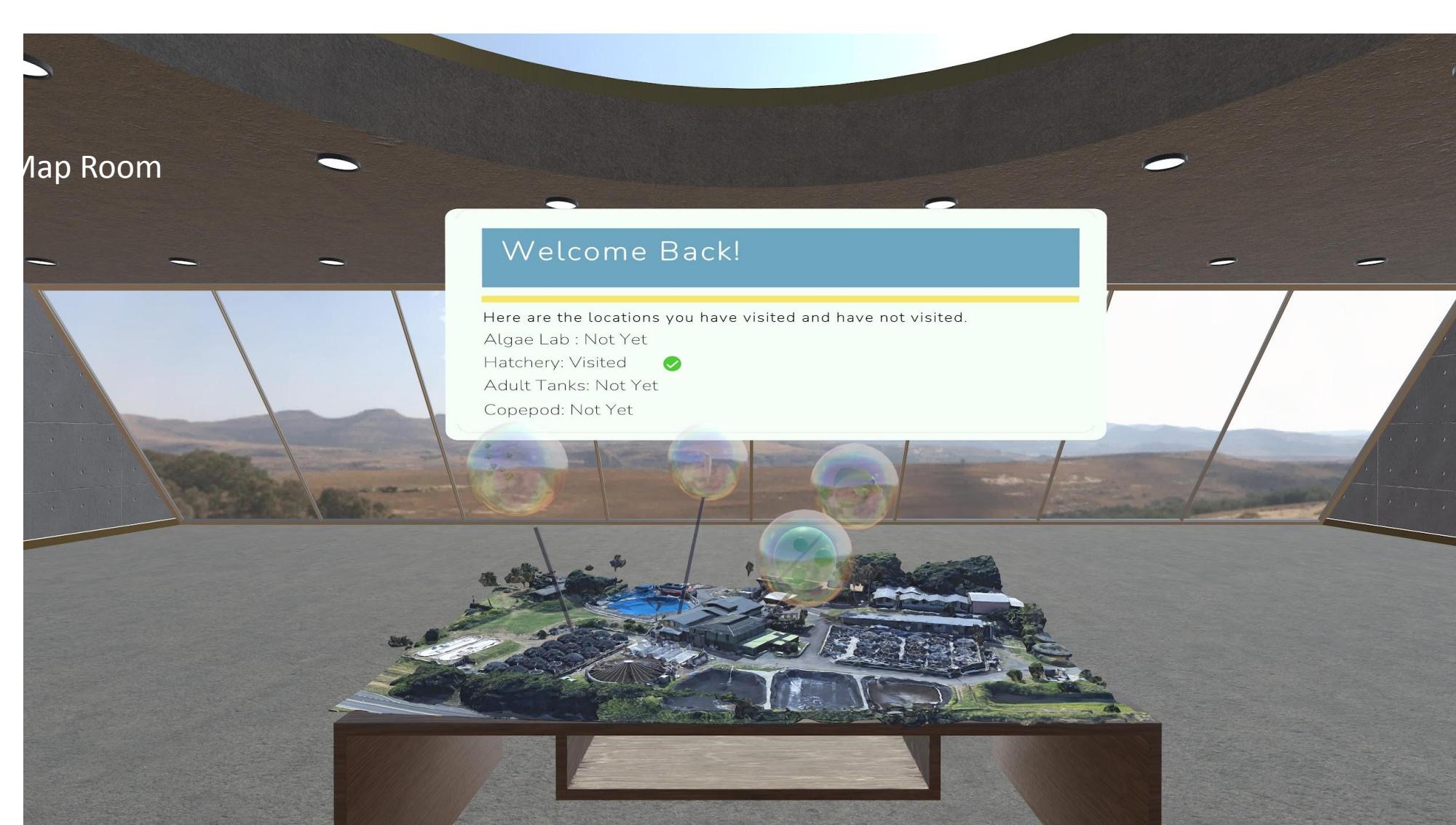


Environment and Tools



Conclusion

The positive feedback received from stakeholders, teachers, and students is a testament to the project's success in meeting its educational objectives. The Oceanic Institute VR experience exemplifies the potential of VR technology as an effective tool for educational outreach and environmental conservation, showcasing how immersive experiences can captivate audiences and inspire them to think critically about the world around them.



Future Work

Future work for this project includes expanding and enhancing the VR experience by developing a template for use in education and outreach programs. Additionally, optimizing the VR experience based on technological advancements and evolving user needs will ensure a high-quality experience. Enriching the content with more interactive scenes and event videos will allow users to gain a deeper understanding of the marine cycle and the work conducted at the Oceanic Institute.

