

KFSCIS

Fall 2023 Senior Design Project

LEADER: Law Enforcement Adaptive De-Escalation Education Resource

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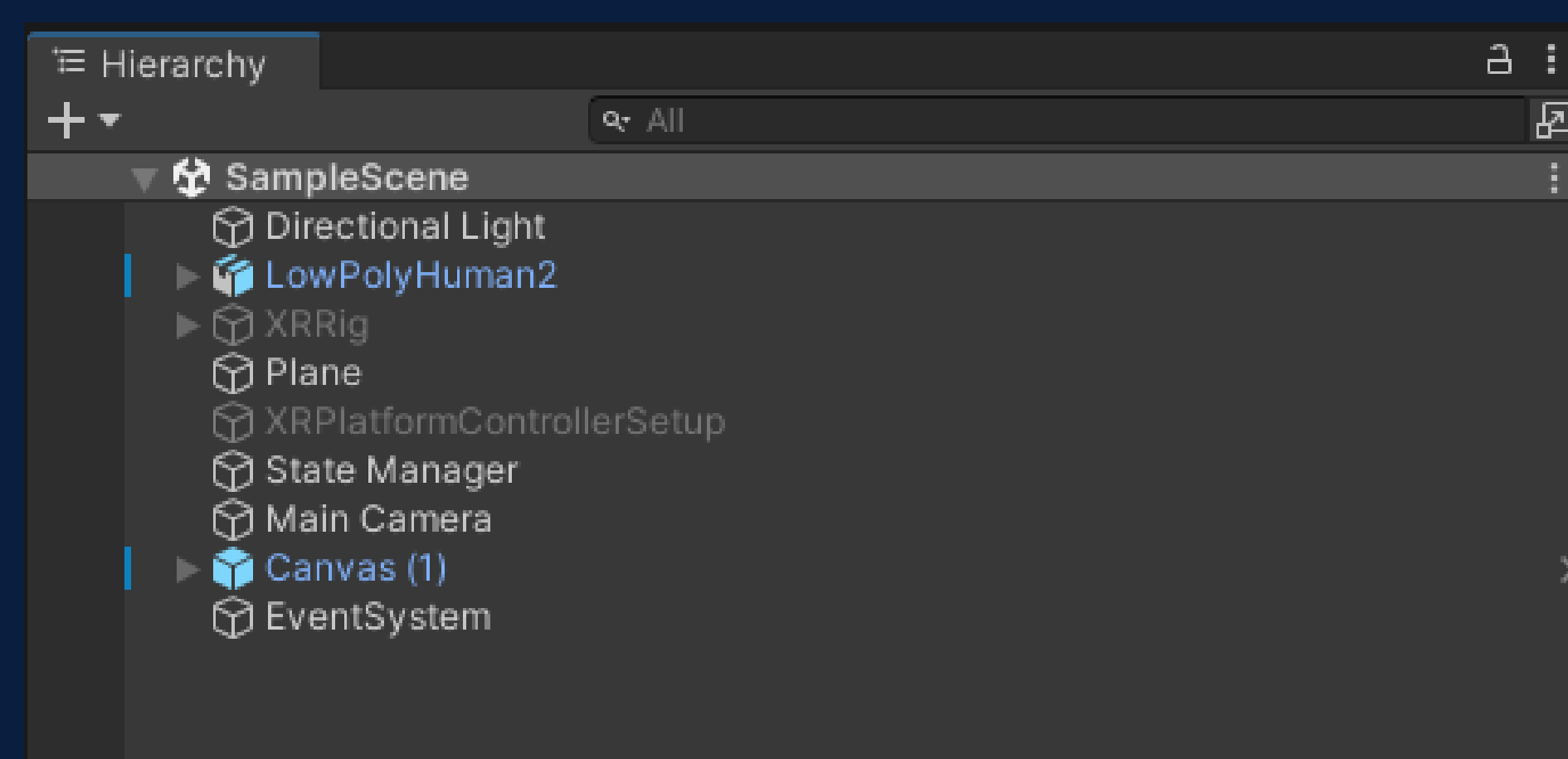
Instructor/Faculty: Masoud Sadjadi, Florida International University

PROBLEM

Law enforcement are tasked with dealing with many different duties and situations everyday. One of the most important skills that every Law enforcement needs is the ability to de-escalate a situation. They must do everything in their power to resolve a situation peacefully, using the law as a final counter-measure.



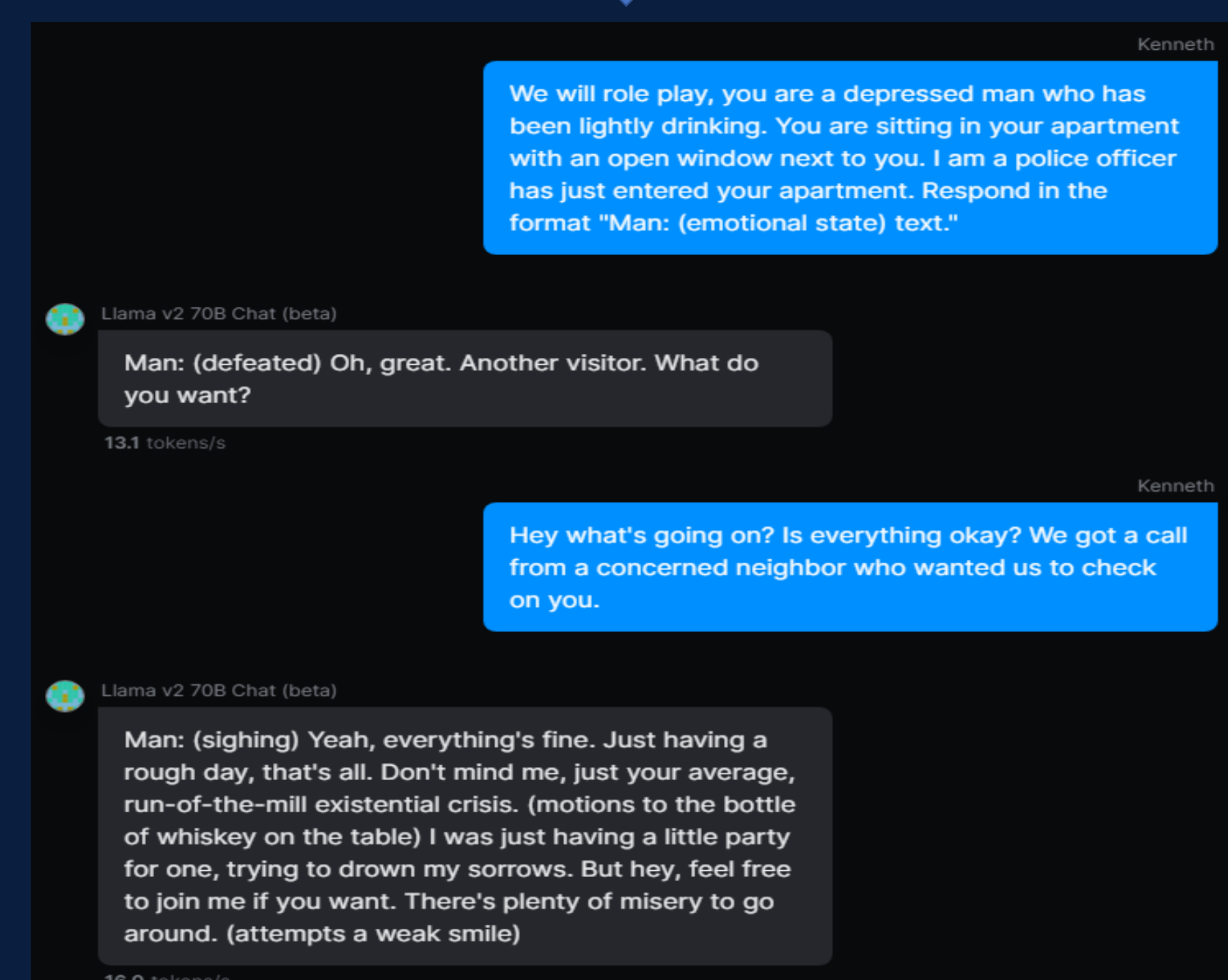
SYSTEM DESIGN



SUMMARY

The current state of the project is the ability, in VR, to communicate with an AI-actor through speaking in the game. You are able to have a conversation with an actor with multiple animations, in an attempt to calm the actor down from their situation. The first situation prepared is one in which you investigating a call about a neighbor who has heard lots of crying and self-ranting next door.

CURRENT SYSTEM



REQUIREMENTS

- Oculus Quest or other VR headset
- Internet Connection



IMPLEMENTATION

Text-to-speech and Speech-to-text: to allow realistic communication between the player and AI-actor.

Real-time AI generated responses: To create a unique and different experience each time the situation is played.

VR: used to help the player feel more immersed in the situation.

REFERENCES

- <https://bja.ojp.gov/events/crisis-response-and-intervention-training-crit>
- <https://openrouter.ai/>
- <https://unity.com/>

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Steven Luis. We/I thank Steven Luis for his assistance and mentorship that I/we received throughout the senior design project.