

LEADER: Law enforcement Adaptive De-Escalation Education Resource

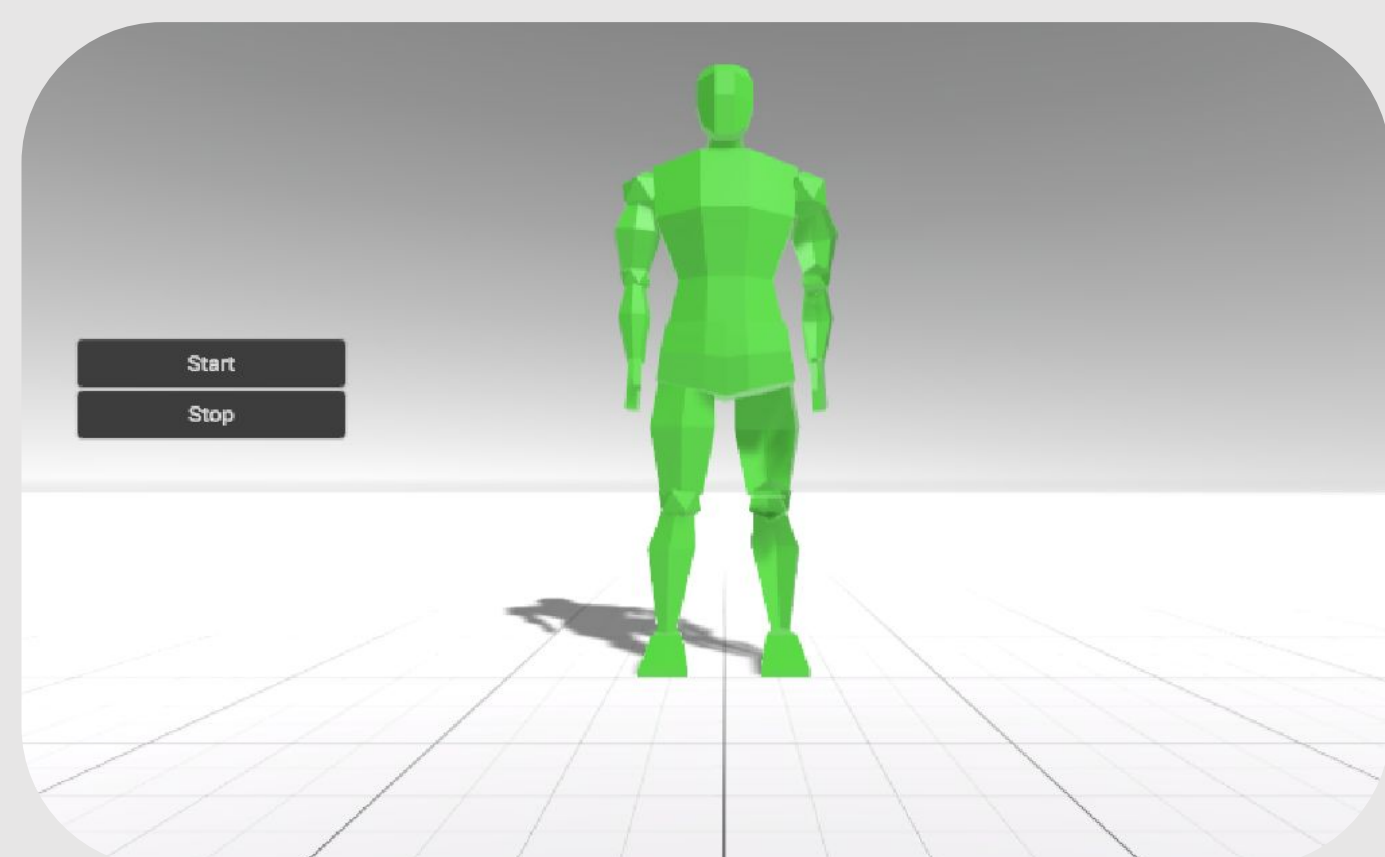
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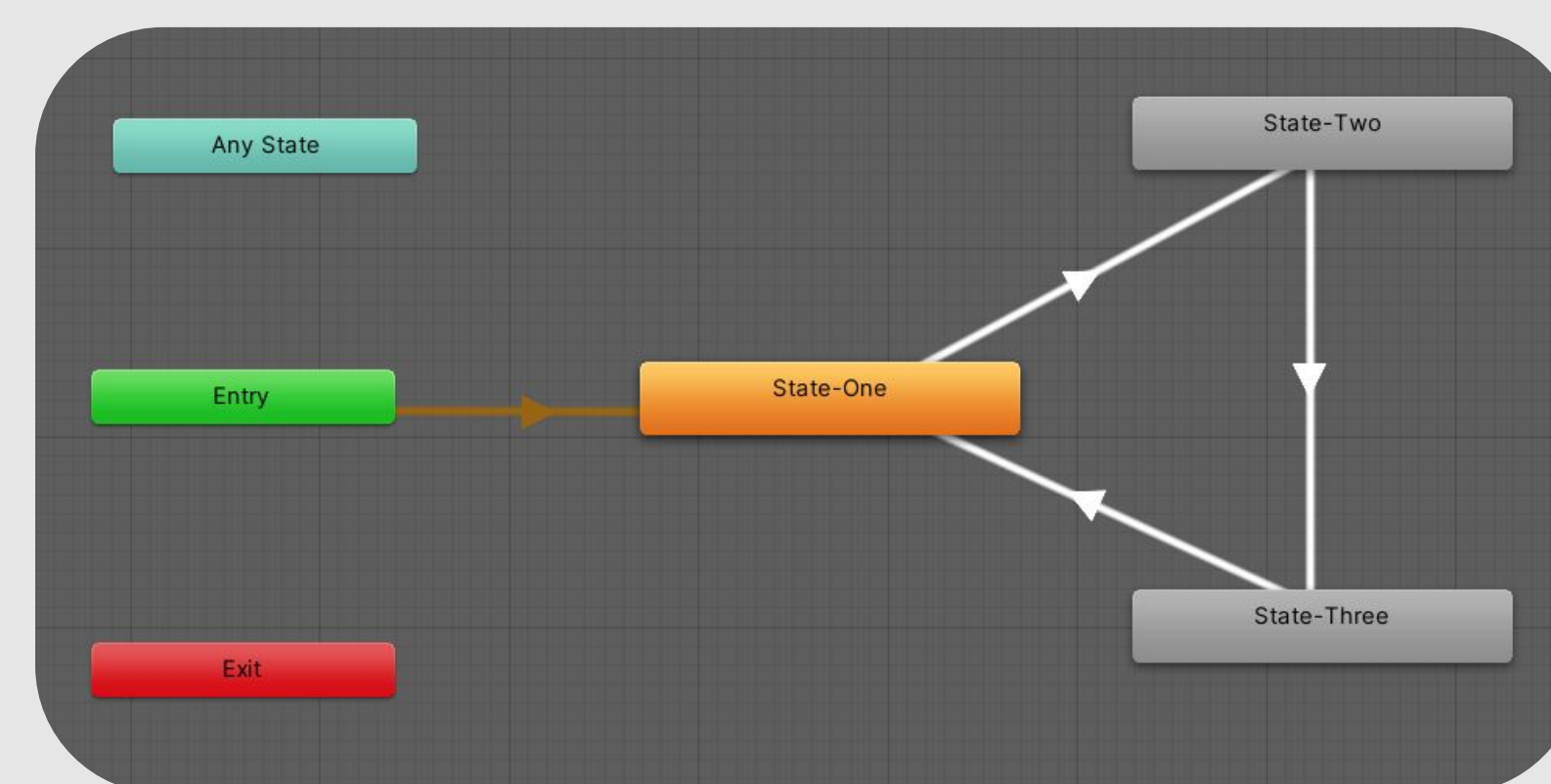
INTRODUCTION

- Exploring the use of Language Models (LLM) for recreating scenarios for police de-escalation.
- Utilizing Unity for implementation, providing an interactive experience for users.



IMPLEMENTATION

- Integrating the Hugging Face Unity SDK to convert speech to text.
- Leveraging Llama2 hosted by Open Router to obtain responses from the LLM model.
- Leveraging Amazon Polly for text-to-speech API
- Utilizing Unity for visualizing responses through character animations.



METHODOLOGY

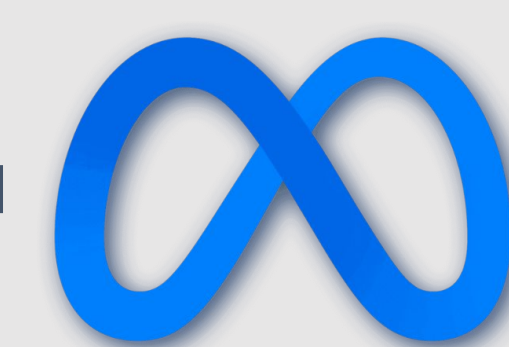
- User engages with Unity interface, taking on the role of a policeman, and provides spoken input.
- Hugging Face SDK processes speech to text for further analysis.
- Llama2 model, roleplaying as a civilian, interprets input and successfully engages in conversations.
- Amazon Polly converts the text response to speech.
- Unity renders the response through character animations for an immersive and interactive experience.

CONCLUSIONS

- Successful integration of LLM models into Unity for creating interactive scenarios.
- Llama2's effective roleplaying as a civilian, leading to successful and engaging conversations with users acting as policemen.
- Efficient pipeline for converting speech to text, generating LLM responses, and rendering animations in Unity.
- Enhanced user engagement through a dynamic and responsive environment.



Hugging Face



Meta



Unity



Amazon Polly



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