


Team 4: Vision Statement

Team Name: The Documenters 

Project Name: Spatio-Temporal Immersive Visualization of News Events

Project Sponsor: Terawe

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Problem Significance

Our project tackles the problem of keeping up with the magnitude of news events in today's global reach of reporting and technology. Current news consumption can be overwhelming, passive, and unengaging by reading long articles and often incorrect through social media. Having an immersive visualization of news events can help a wide audience of people gain a deeper understanding of global news events and educate them simultaneously. Additionally, creating this on a web-platform will allow a wider audience to use the visualization as not everyone has access to a virtual-reality headset. Ease of access will also allow it to serve as a centralized news source where people can obtain information on specific areas worldwide.

Project Overview

We will create an interactive, spatio-temporal immersive visualization of news events using a metaverse platform. Unlike traditional VR headset-based experiences, this project leverages web-based metaverse technologies, NLP (Natural Language Processing), and GPT-4 to allow users to explore and understand news events that have occurred in both Spanish and English languages. However, users will be able to access the metaverse platform through a standard web browser or mobile device, eliminating the need for VR headsets. This ensures wide accessibility.

Current Solutions

As of now, there are no popular platforms that focus on providing global news that utilizes the metaverse platform. There are typical community-based websites, like Reddit, which depends on the entire community to spread global news. As a result, there is the possibility of important global news not being reached to the rest of the world. With this project, not only do we aim to provide global news in an unbiased manner by leveraging AI/ML, but to also provide an accessible, immersive, and interactive experience that encourages readers to be up to date with global news.

Project Outcomes:

The outcome of this project is to offer an engaging and educational way for users to explore news events in an immersive, spatio-temporal metaverse without the need for VR headsets. It promotes cultural understanding and facilitates interactive learning through a combination of NLP, GPT-4, and web-based metaverse technologies. Through this, we hope that the public can be more aware of current events and we seek to create a community of understanding, preparedness, and engagement. The core concept is to provide an interactive and educational way for users to engage with global news events.

Initial Project Milestones:

- Understand existing metaverse platforms and the potential of web-based environments.
- Reviewing and selecting appropriate NLP models and tools for the project's requirements.
- Identify reliable sources for news events, audiovisual content, and geospatial data.
- Design the user interface and experience for the metaverse platform, considering both mobile and desktop access and create mockups or wireframes detailing the user journey and key interactive components.
- Set up the development environment and tools by establishing the initial integration with technologies necessary for the metaverse environment.
- Begin initial setup of the backend infrastructure for handling and processing data.
- Implement NLP models for initial testing, including content extraction, summarization, and translation.
- Integrate GPT-4 for chatbot functionality and test basic conversational capabilities.
- Combine all individual components to create a working prototype of the platform.
- Conduct internal testing to identify bugs and areas for improvement.

Implementation Platform: VSCode, React Native, Native mobile app platforms (Swift for iOS, Java/Kotlin for Android), Unity for “metaverse” implementation

Technologies: NLP, AI/ML for data visualizations and chatbot (GPT-4), news API