

CS6611:
CREATIVE AND INNOVATIVE PROJECT
Zeroth Review

**Application of Extended
Reality for Airforce
Operations and Training**

Team no: 42

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Application of Mixed Reality for Airforce Operations and Training

Domain: Extended Reality

Problem Statement:

The training operations of the Air Force pose significant financial challenges, primarily due to the high cost of fuel required for aircraft operations. Ensuring the highest standards of training for personnel is paramount, especially considering the substantial investment in aircraft and the considerable portion of funds allocated to fuel expenses. To address these challenges, we propose the implementation of a mixed reality system designed specifically for airmen training. This mixed reality system will offer immersive training experiences without the need for actual aircraft flights, thereby eliminating fuel costs and reducing wear and tear on aircraft. By leveraging state-of-the-art technology, such as virtual reality and augmented reality, airmen will be able to engage in realistic simulations of flight maneuvers and navigation through various terrains.

Keywords:

Terrain generation, Virtual reality, Extended reality.

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