AR 3D Drawing using AR Core

Abstract:

3D Drawing with Augmented Reality has been developed to bridge the gap in communicating a concept or presenting an idea in the real-world space. Such ideas when presented on paper would require the designer to empathize with the user and have a fair assumption that the idea would need to be imagined just as done by the creator. It allows content creators to draw in the air, treating the world as their canvas.

This application is going to help content creators a great deal in helping them present their ideas better. It is also going to replace sticky notes and other messages on paper with messages left in air on the world canvas. This can also act as a doodling app where users draw lines or doodles in the 3D space in air.

Existing System:

3D Drawing is available as Paint 3D where this application will be installed in laptop and user can draw 3D on laptop itself. There is no such app available in the market which augments 3D drawings on air.

Proposed System:

Here, we are going to develop a mobile application that runs on Android devices and lets the user draw on the world alias air, treating it as a canvas.

Software Tools:

1. Unity Hub
2. Unity 3D
3. Android SDK and NDK
4. JAVA SDK
5. Google AR Core
6. C# Microsoft Compiler
7. VS Code

Hardware Tools:

1. Laptop
2. Operating System: Windows 11
3. RAM: 16GB
4. ROM: 4GB
5. Fast Internet Connectivity
6. Android Smartphone supports AR Core