# ARTIVERSE 2.0

| | |
|---|---|
| **Team Name** | **: Quantum coders** |
| **Theme** | **: Student Innovation** |
| **Title** | **: Virtual Visions: An Interactive 3D Art Gallery** |
| **Team Members** | 1. Vaishnavi S |
| | 2. Eswari LR |
| | 3. Poojasri S |

## ABSTRACT

This project aims to create an interactive 3D art gallery using *Three.js*, a WebGL-based JavaScript library. The focus is on building immersive environments where users can navigate and interact with 3D art pieces in real-time. The gallery will leverage concepts like scene creation, camera configuration, renderer optimization, and texture application to ensure realism and engagement. Users will explore animated 3D objects, navigate using intuitive controls, and adjust parameters in real-time using a GUI debugger. The project integrates techniques such as material and geometry creation for customizable visual elements and animation to enhance interactivity. Built with Three.js and accompanying tools like OrbitControls and dat.GUI the project demonstrates how modern web technologies can redefine digital art presentation. This innovative approach combines creativity, interactivity, and cutting-edge 3D rendering techniques, pushing the boundaries of web-based experiences.

**KEYWORDS:** Three.js, interactive 3D gallery, scene creation, WebGL, real-time rendering, GUI debugger, animation, immersive web experiences.

**PROGRAMMING LANGUAGES & TOOLS:** Three.js, WebGL, dat.GUI, OrbitControls, TextureLoader, JavaScript, HTML, CSS.