DESCRIPTION :

Laboratories are an important environment for students learning where students get hands-on training. In Civil Engineering, setting-up a real laboratory is challenging due to the high requirement of resources such as space and manpower, and high setup and maintenance cost. The Virtual Laboratory will allow the users to feel the environment which she/he will get in the real laboratories and enhance their teaching and learning experience.

The main objective of the virtual lab is to provide remote access to laboratories, where students enthuse can conduct experiments by arousing their curiosity. This would help them in learning basic and advance concepts through remote experiments. Virtual lab also help students to learn difficult concepts in various domains by creating online interactive media. It is available 24 × 7, so students can learn concepts at their own pace and convenient..

Our project is on making META labs to make the lab more realistic and understandable to the student with the 3D view.

Our targeted audience are---

* UG
  + UG, B.Tech Civil Engineering Students

On what problem we are working?:

We are working on making 3D lab for civil engineering student because the labs are available in 2D form which are complex to understand as compared to 3D.

What is the approach for finding solution for the problem?:

We will make 3d experimental lab which help student to make their concepts more clear with the easy approches. The lab content is chosen such that it covers the syllabus of Laboratory or particular topic’s experiment as per AICTE curriculum.

Technology stack for the problem statement

>UNITY for 3D coding

>AR VR

>AI

What are the drawbacks in existing solution?

How are solution is different from the existing solution?

The current solution is available in 2D form but we are trying to make 3D virtual lab which is more convenient to the student as well as the teacher to explain and connect as it feel like real looking components of virtual lab give the user a feel of the actual laboratory. where your avtars (your animated character )perform experiment according to your instruction. Where you can enjoy the learning.