IDEA/APPROACH DETAIL

Category (Software/Hardware): Embedded

Ministry / Organization Name: AICTE, MIC-Student Innovation

Problem Statement Name: Developing Virtual Reality based solutions

Team Name: VROOM

Team Leader Name: Surya Narayanan CS College Code: 1-3512999651

IDEA PROPOSED:

The main aim of the project is to provide a real time environment on to a online meet.

It will be a next stage of education.

Experience Simulation Model Host's view **Environment** Cloud Once the students The students in the The class model will join the meet, class can able to be trained in unity or they will be simulate their any other 3d engine. The developed allotted a seat in Through the 3d view, A default 2d view of the character by moving the class. The 3d the students who are model will be class will be given to the through the keys. If A default 2d view will view of the uploaded to cloud. host where each student in the meet can a student wants to be provided, as once classroom will be is allotted a seat. Host experience the real leave the class, they the students joins the seen by the time environment of can see the movement The model should can go out of the meet, will be allotted students. the class. Making it of the student. They will trained only once classroom. If the a seat. the next stage of get a notification if they for the virtual student wants to 3d view-Students leave the class. innovation. environment. move to 1st bench, 2d view- Teachers they can go there.

<u>STACK</u> <u>TECHNOLOGIES:</u>

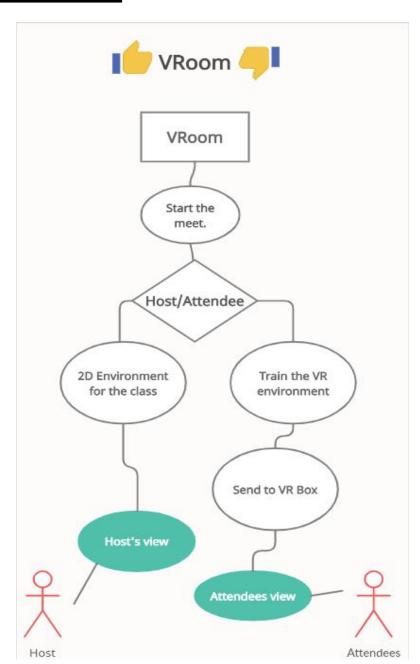
HARDWARE REQUIREMENTS:

- ☐ Integrated Webcam
- ☐ VR Box

SOFTWARE REQUIREMENTS:

- Unity/Unreal engine
- Blender
- Open CV
- > Tensorflow
- > AWS

USE CASE:



HIGHLIGHTS:

- The students who are present in the class will be displayed to the teachers.
- Students once entered the meet will allotted a seat in class.
- Students can simulate their character by simply moving through keys.
- A real time environment of class will be experienced by the students.

DEPENDENCIES:

- A class 3d model has to be trained once before the class or meet starts.
- A virtual 2d animated class has to be set up before the class starts for the teachers view.