



Gandhinagar Institute of Technology

CE & IT Department

A Report on

“Expert Lecture Session on Gaming Development using Unity 3D”

(From 28th May to 29th May 2021)

Objective:

The objective of the session was to provide the platform for applying various Computer Gaming concepts using Unity3D. The goal of the workshop was to empower the participants for developing various things using Unity 3D. Participants would get the knowledge of Unity 3D and its use in Gaming with the help of hands-on exercises.

About Expert Lecture:

The Session provided a valued platform for the industry specialists from Company to exchange and explore the latest views on technological developments in the field of Gaming. 60 participants have been attended from Sem-6 Students from Computer Engineering and Information Technology Department. What's the future of game development? It constantly changes. New game development trends emerge every year. And technology advances, bringing opportunities for game development studios to innovate. Also provided hands-on sessions in each area. Coordinators of Workshop are Prof Mukesh Parmar and Prof Dhaval Vaja.

Structure of Lecture Day-1(28/05/21) for Computer Engineering Day-2(29/05/21) for Information Technology Students

Time: 11:00 am to 1:30 pm

Mr. Mahesh Gurjar discussed built for stability and performance, Unity 3D's powerful tools – including our latest addition, Bolt Visual Scripting – are aimed at helping you build the best possible game, and gaming experience, for your players. Whether you're creating stunning visuals or looking to optimize your coding workflow, you'll find everything you need to create your game and ensure its long-term success. Unity is currently the most popular gaming engine used by developers around the world - and for good reason. It has a powerful visual interface for making games, cross platform development, and an active contributing community. Unity is a cross-platform game engine primarily used to develop video games and simulations for PC, consoles, mobile devices and websites. It is developed by Unity Technologies and was 1st announced only for OS X, at Apple's Worldwide Developers Conference in the year 2005, it has since been extended to almost every available platform. He also mentioned about Here is a list of some of the numerous features of Unity from the technical point of view. These are Creating and Destroying Game Objects, Access the Components, Events for Game Object, Dealing with Vector Variables and Timing Variables, Physics Oriented Events, Coroutine and Return Types. He showed how to use interface of Unity 3d and created simple game in the session.

Glimpse of Expert Lecture on Gaming (Unity 3D)

The slide content is as follows:

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Opp. Manav Mandir, Gurukul Road
Memnagar, Ahmedabad-380052
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Overview of the Unity Interface

- Toolbar
- Hierarchy View
- Scene View
- Game View
- Inspector Window
- Asset Store
- Project Window
- Console

Gaming Development using Unity 3D

Introduction of Gaming and Expert

The screenshot shows the Unity 3D development environment. The Hierarchy panel on the left lists 'SampleScene', 'Main Camera', and 'Directional Light'. The main scene view is currently in 'Shaded' mode. A 'Magnifier' window is overlaid on the scene view, showing a zoomed-in view of the scene with a 200% magnification level and navigation controls.

Gaming Development using Unity 3D

Explanation of Toolbar of Unity 3D Gaming Platform

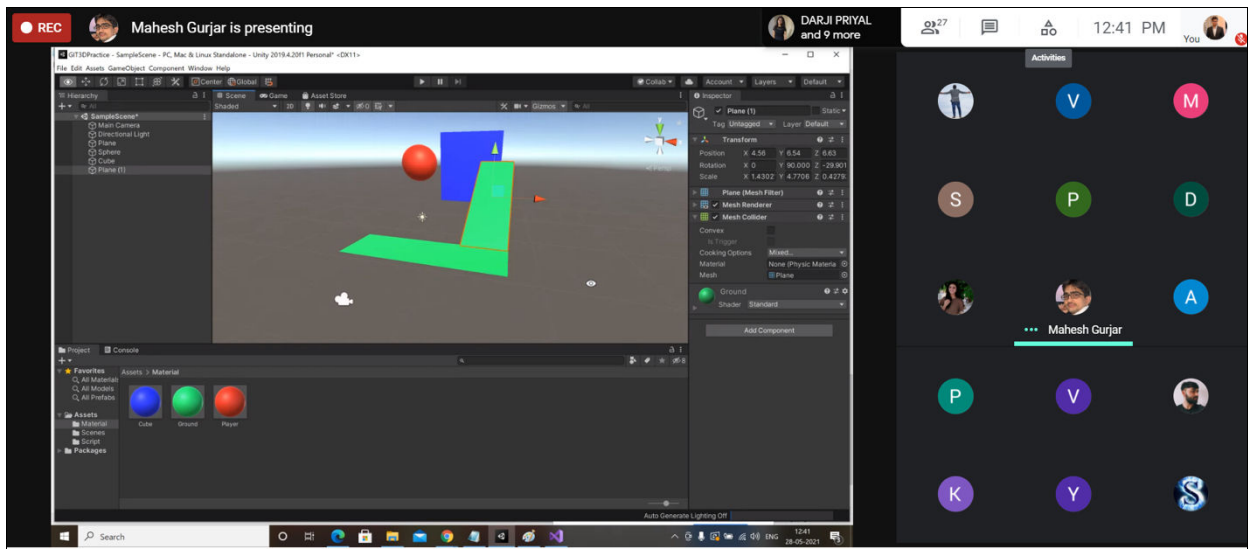
```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class PlayerMovement : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {
    }

    // Update is called once per frame
    void Update()
    {
    }
}
```

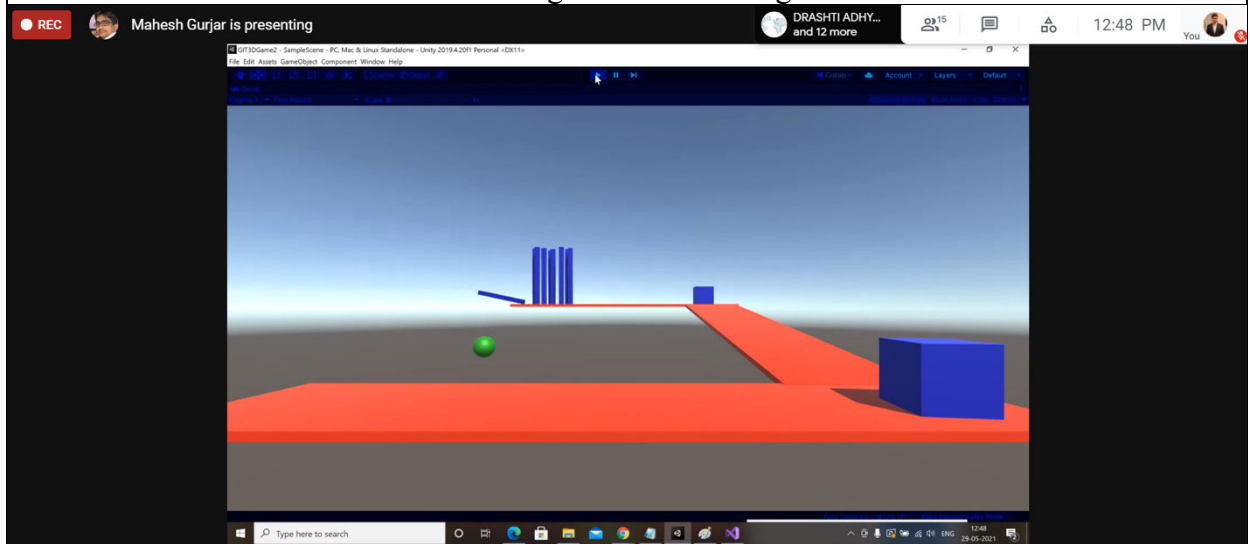
Gaming Development using Unity 3D

Explanation of Gaming Object Coding in Visual Studio IDE



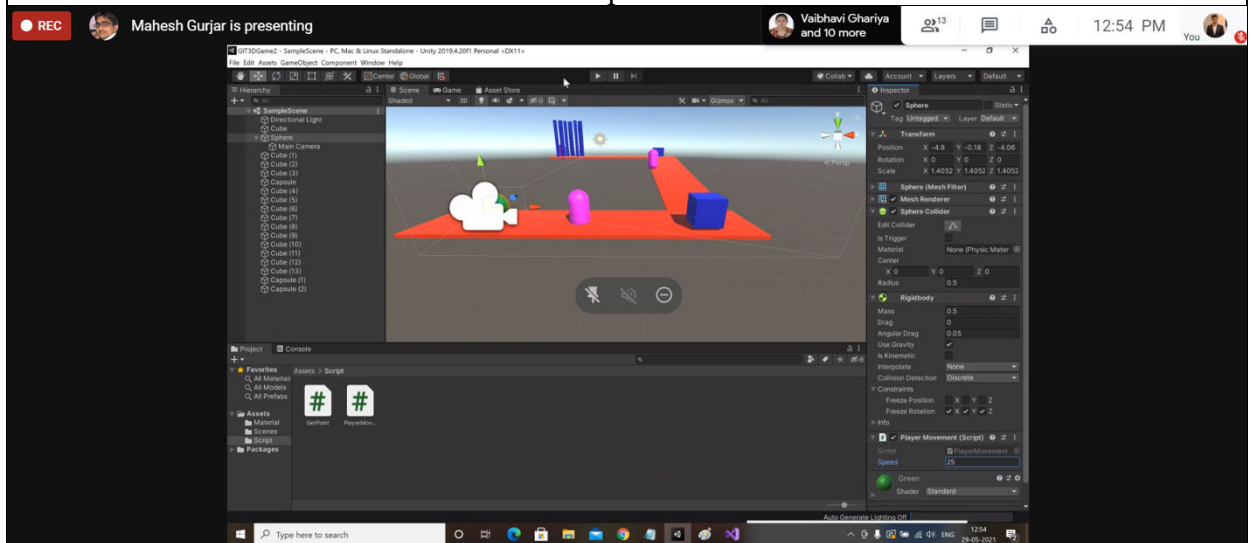
Gaming Development using Unity 3D

Starting Phase of Gaming



Gaming Development using Unity 3D

Final Output of Game



Gaming Development using Unity 3D

Setting Camera angle of an object for the Game

