

PROFESSIONAL TRAINING REPORT

at

Sathyabama Institute of Science and Technology (Deemed to be University)

Submitted in partial fulfillment of the requirements for the award
of Bachelor of Technology in Information Technology

By

Jestin Jose P

REG.NO.39120047



DEPARTMENT OF INFORMATION

TECHNOLOGY SCHOOL OF COMPUTING

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

JEPPIAAR NAGAR, RAJIV GANDHI

SALAI, CHENNAI - 600119, TAMILNADU

APRIL 2022 ----- Section Break (Next Page) -----



SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
Accredited with Grade "A" by NAAC



(Established under Section 3 of UGC Act, 1956)

JEPIAAR NAGAR, RAJIV GANDHI

SALAICHENNAI - 600119

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DEPARTMENT OF INFORMATION

TECHNOLOGY BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of Jestin Jose.P

(Reg. No: 39120047) who carried out the project entitled "Animal biotechnology lab - 3D Gaming App" under my supervision from November 2021 to January 2022.

Internal Guide

DR.S.Sendru srinivasulu

Head of the Department

DR.R.SUBHASHINI

Submitted for Vivavoce Examination held on

Internal Examiner

External Examiner ----

DECLARATION

I, **Jestin** hereby declare that the project report entitled "Animal bio technology lab" done by me under the guidance of **Dr.**

S. Sendru srinivasulu

is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in Computer Science and Engineering.

DATE: 28-04-2022

PLACE: CHENNAI

SIGNATURE OF THE CANDIDATE -- Section Break (Next Page) --

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to **Board of Management of SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. T. Sasikala M.E., Ph.D., Dean, School of Computing, Dr. R. Subhashini, M.E., Ph.D. Head of the Department of Information Technology** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Dr. V. MARIAANU** for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Information Technology** who were helpful in many ways for the completion of the project. -----Section Break(Next Page)-----

Animal biotechnology lab - 3D Gaming app

Submitted by: 39120047 (Jestin P Jose)

Collaborated Department: Biotechnology Department

1. TITLE:

“Virtual Animal biotechnology lab”

2. ABSTRACT:

The aim of the project is to create a gaming app to solve the problem of lack of basic knowledge regarding the laboratory experiments for the Life science students due to the pandemic. The 3D models of the lab equipments and lab room were designed using “MAYA SOFTWARE” .The project was further proceeded by incorporating the 3D models in “UNITY SOFTWARE”.It is a new approach to education which will encourage the students to gain interest in performing experiments, it prevents errors in experiments performed, avoids wastage of reagents in the lab, it can save a lot of time and can be accessed anywhere. It can also be used as an evaluation tool during practical examinations.

This app includes,

- Practice mode: It is an interactive learning session with step-by-step instructions on how to perform the experiment and equips the player for the Gaming mode.
- Gaming mode: The player can try performing the experiments without instructions from the computer but with minimum hints. Timer can be set if required.

3. MENTORS:

Dr.S.Senduru.Srinivasalu

4. 3D MODELS:

The 3D models were designed using “MAYA” software . It is widely used in the development of video games and animated films

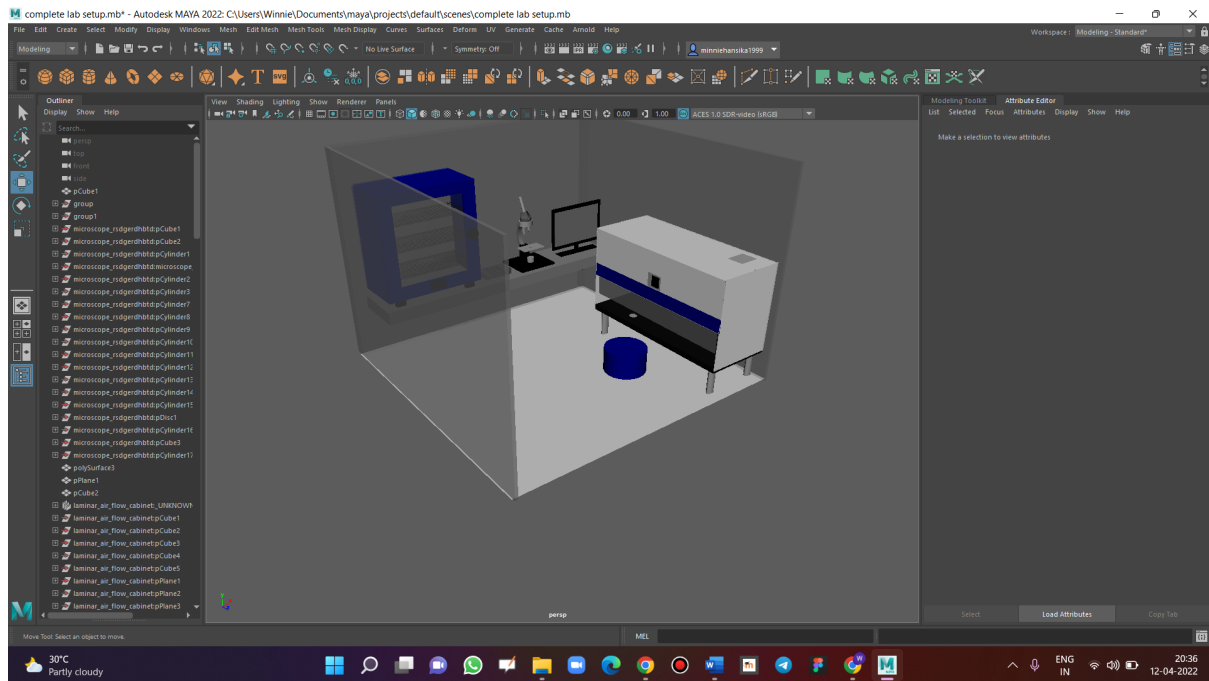
MAYA :

It provides tools for 3D modelling , animation , rendering and much more .

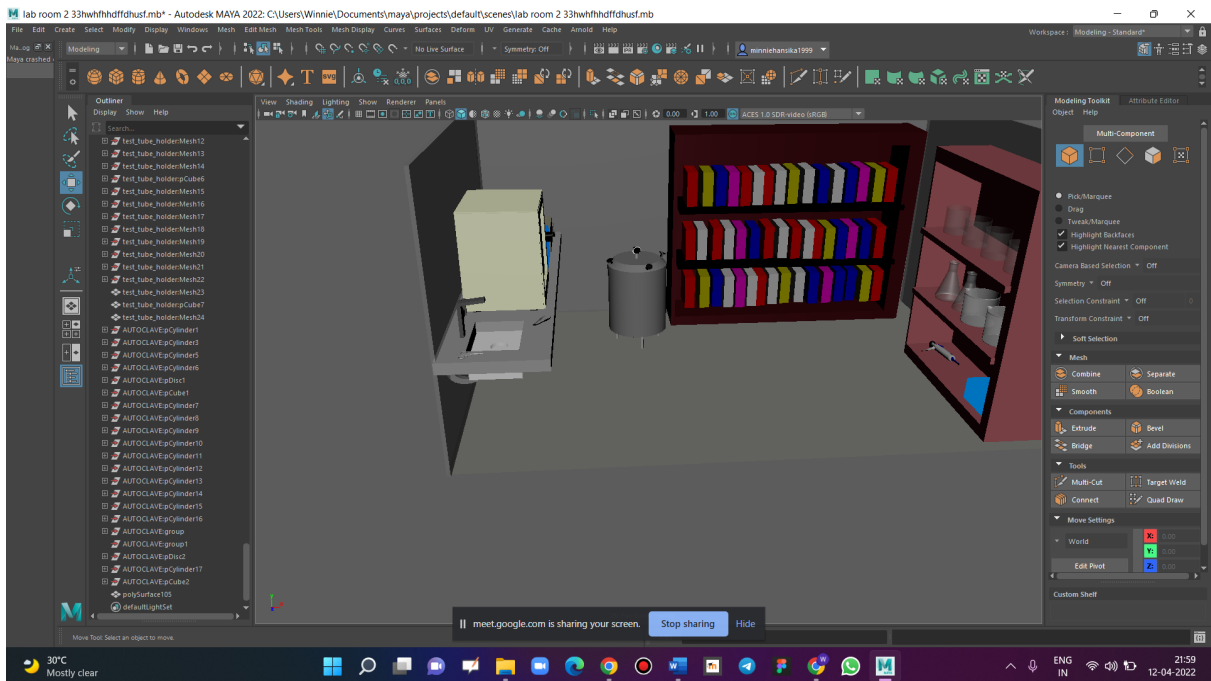
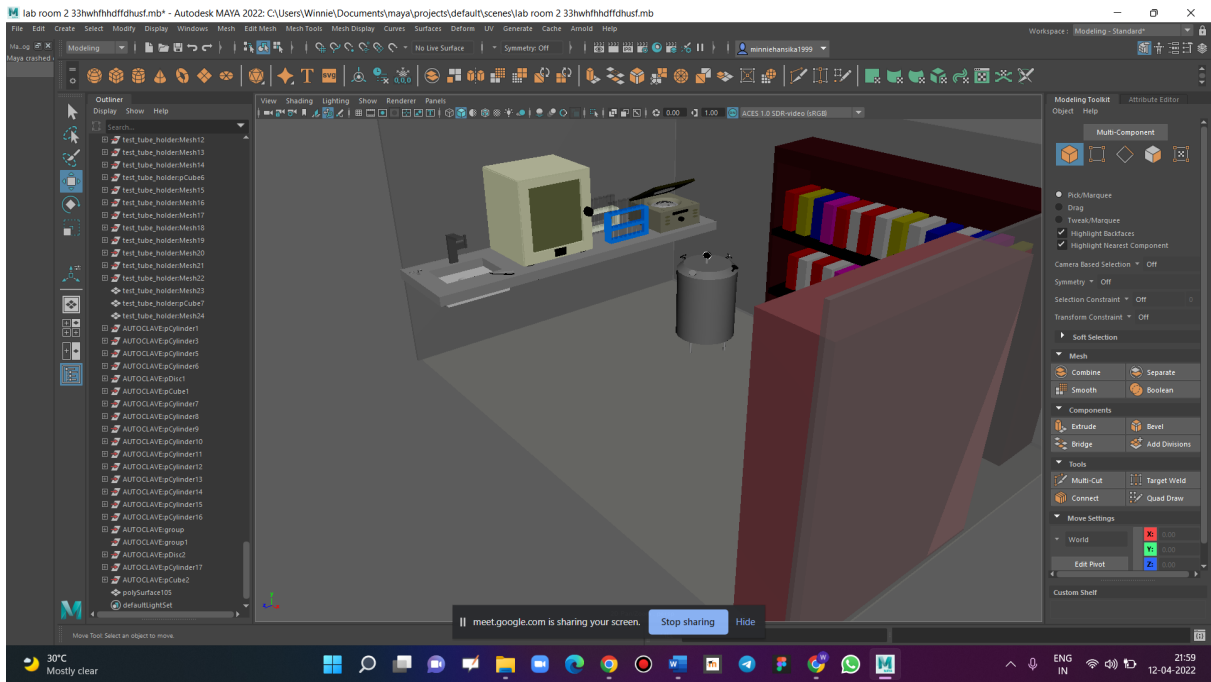
Features:

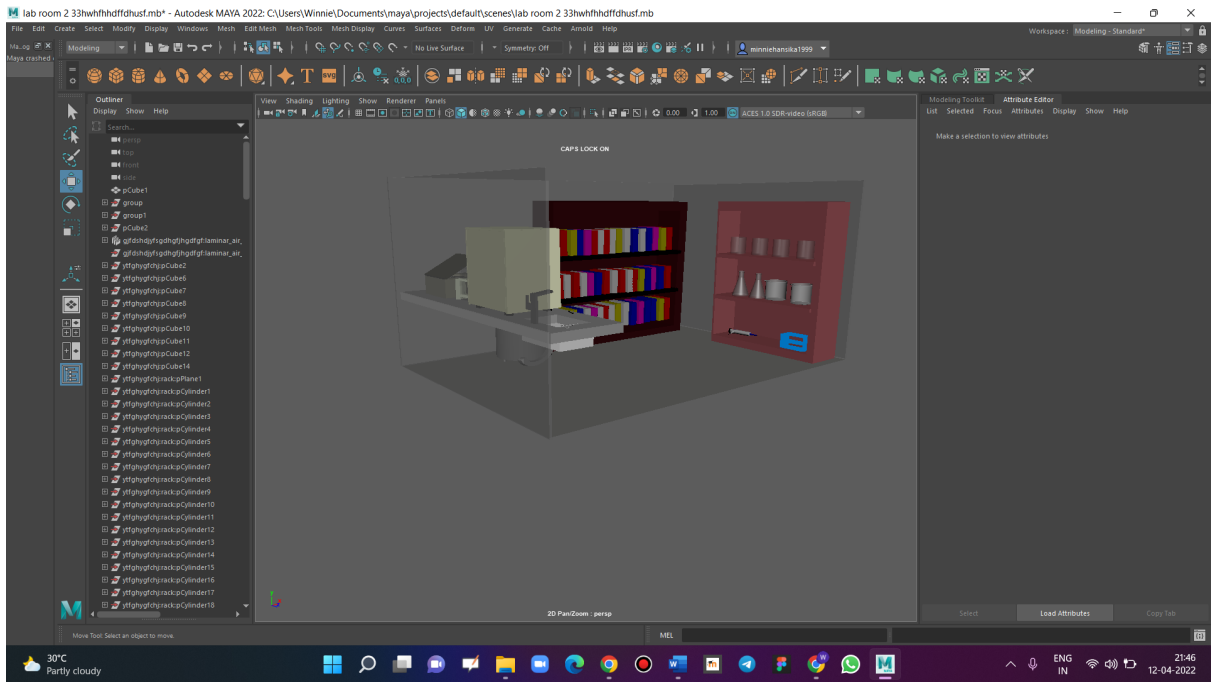
- 3D modelling
- 3D rendering and shading
- 3D animation

DEVELOPED MODELS:

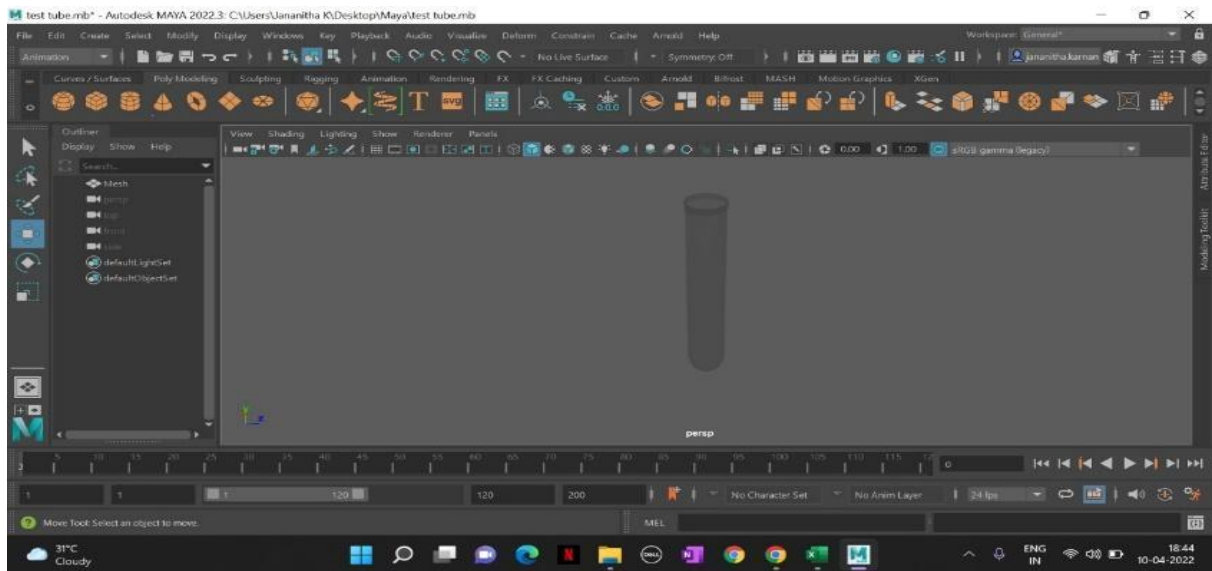


LAB ROOM 1

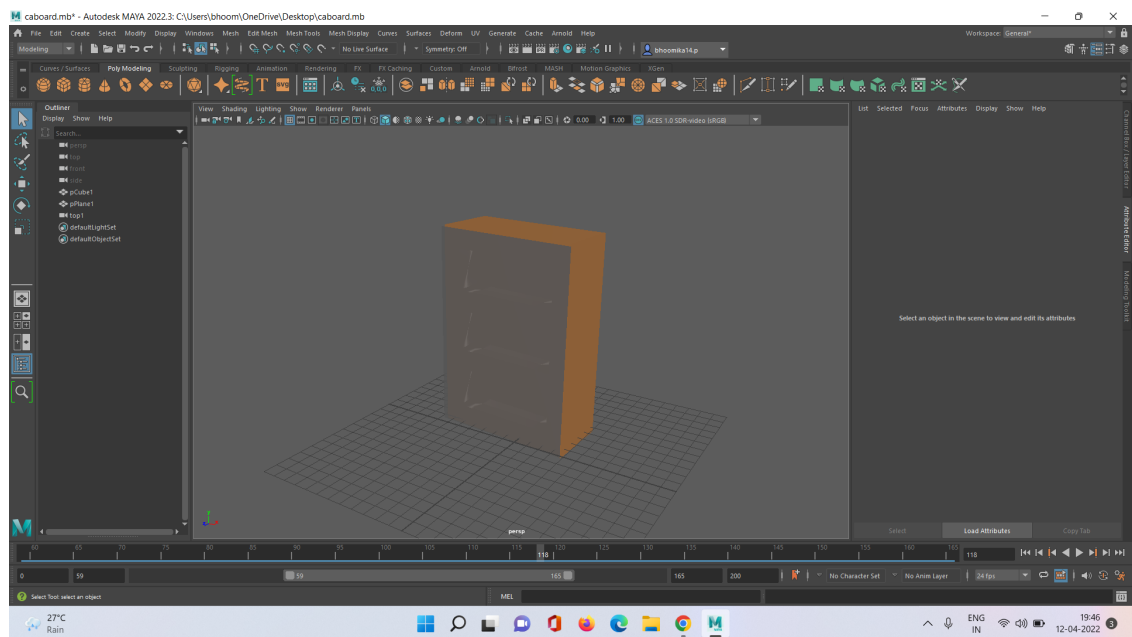




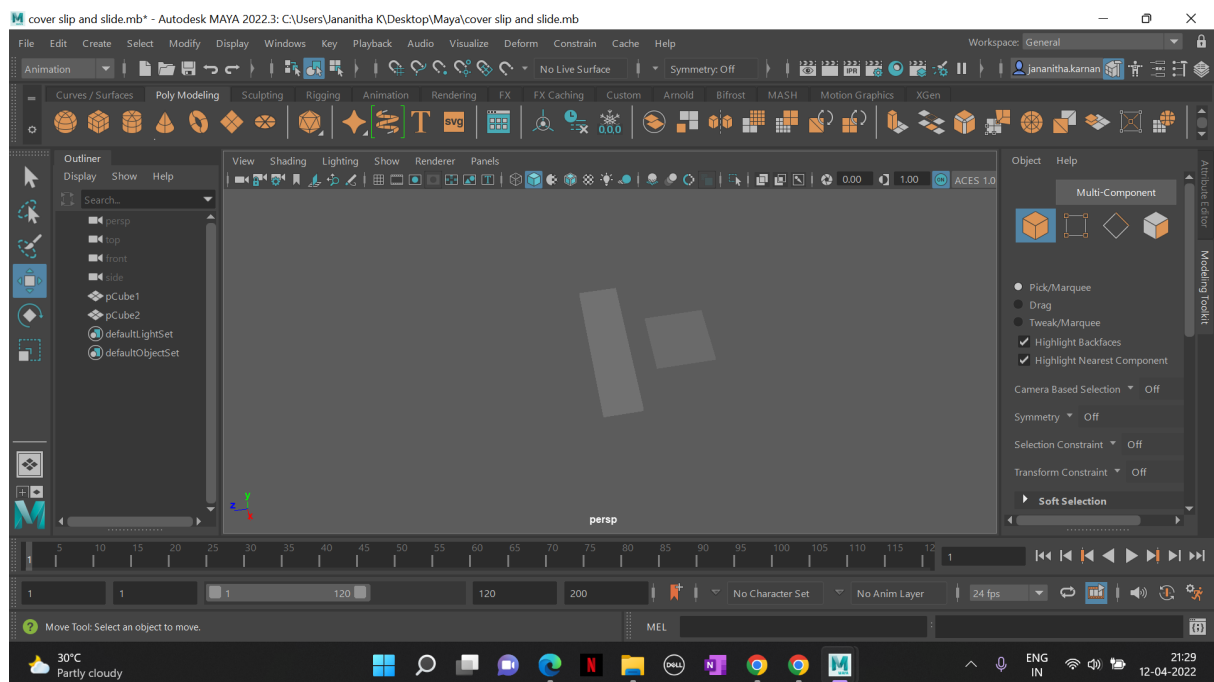
LAB ROOM 2



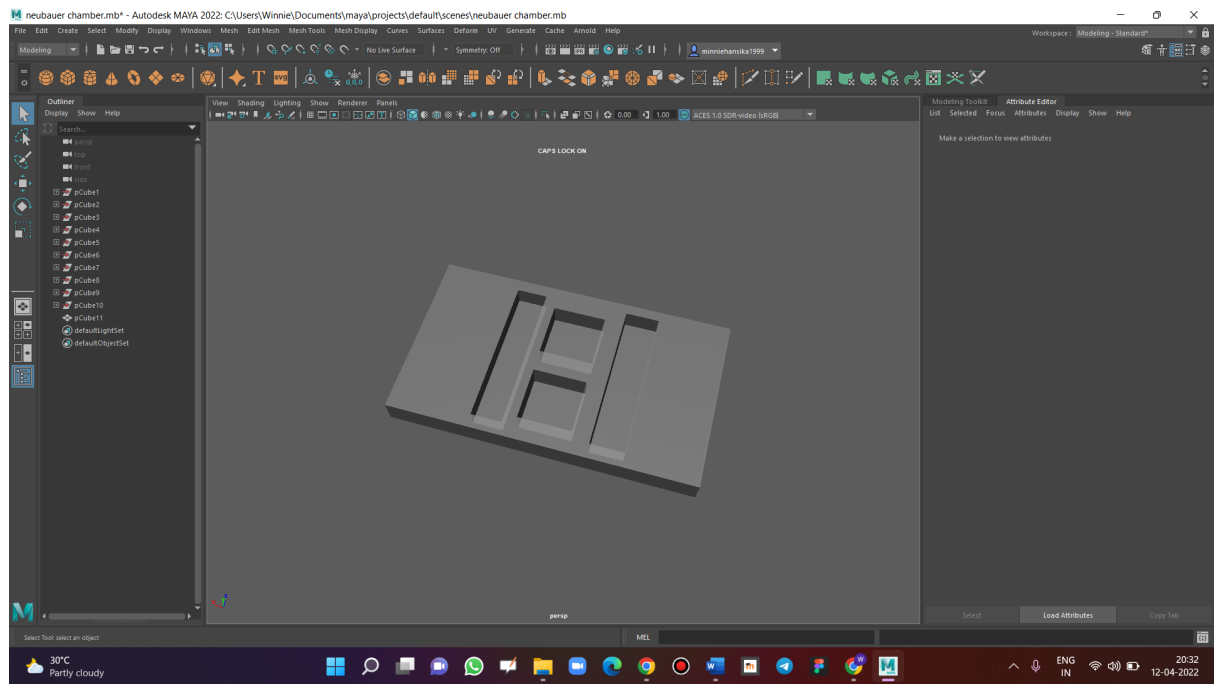
TEST TUBE



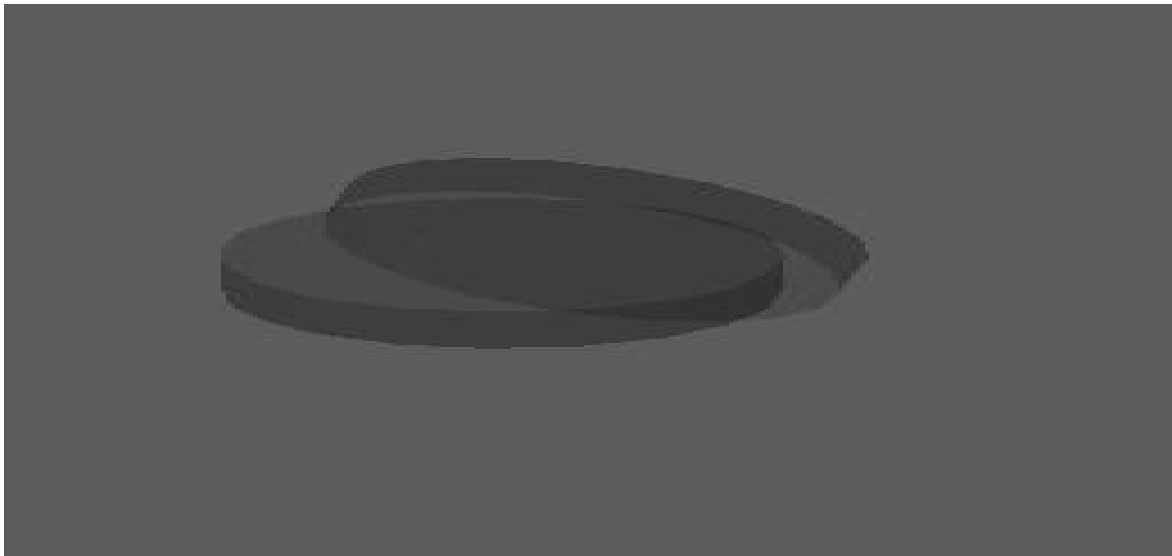
CABINET



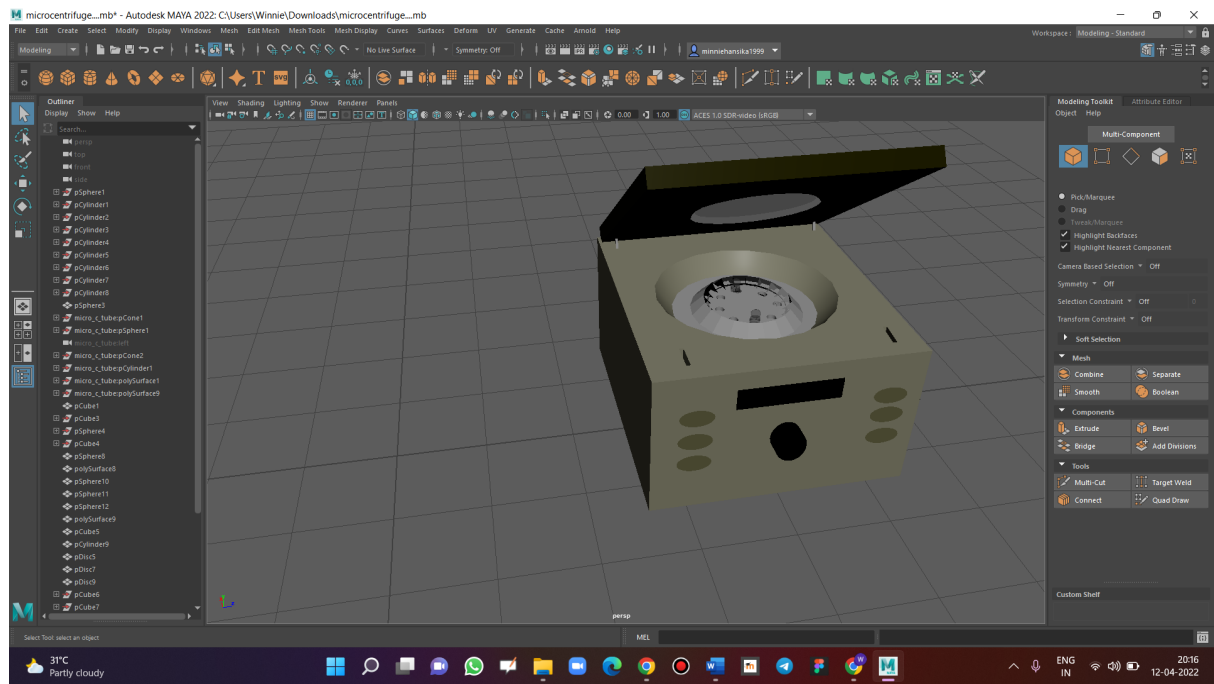
COVERSLIP AND SLIDE



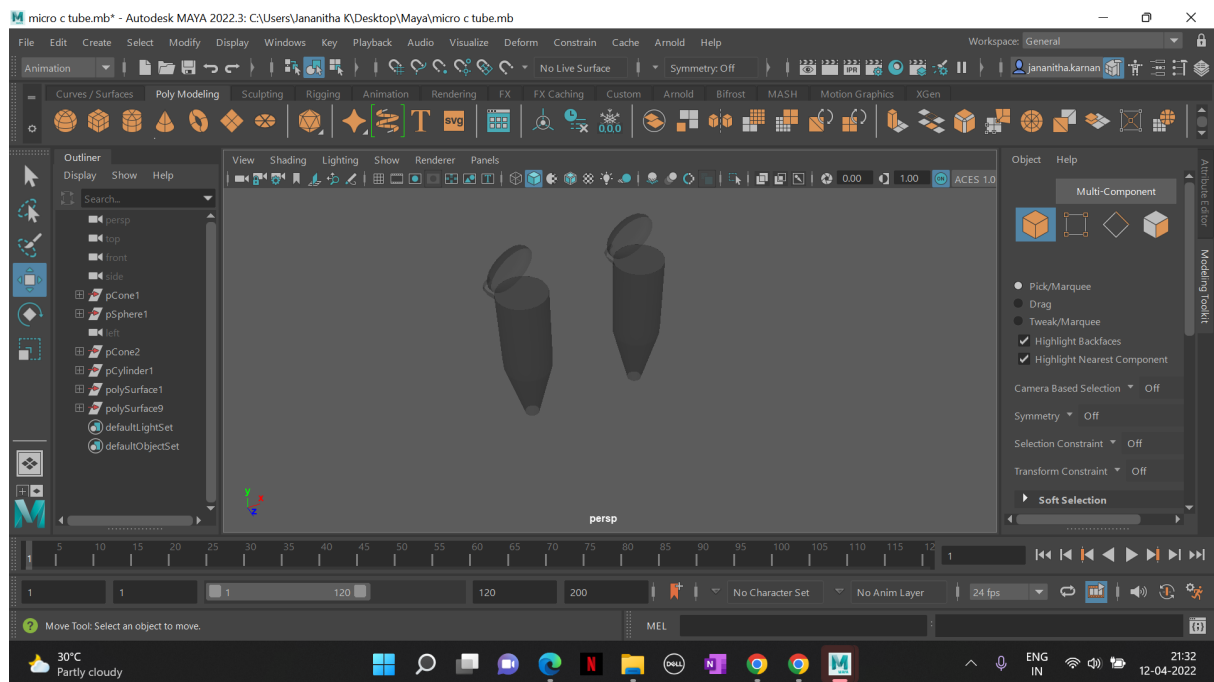
NEUBAUER CHAMBER



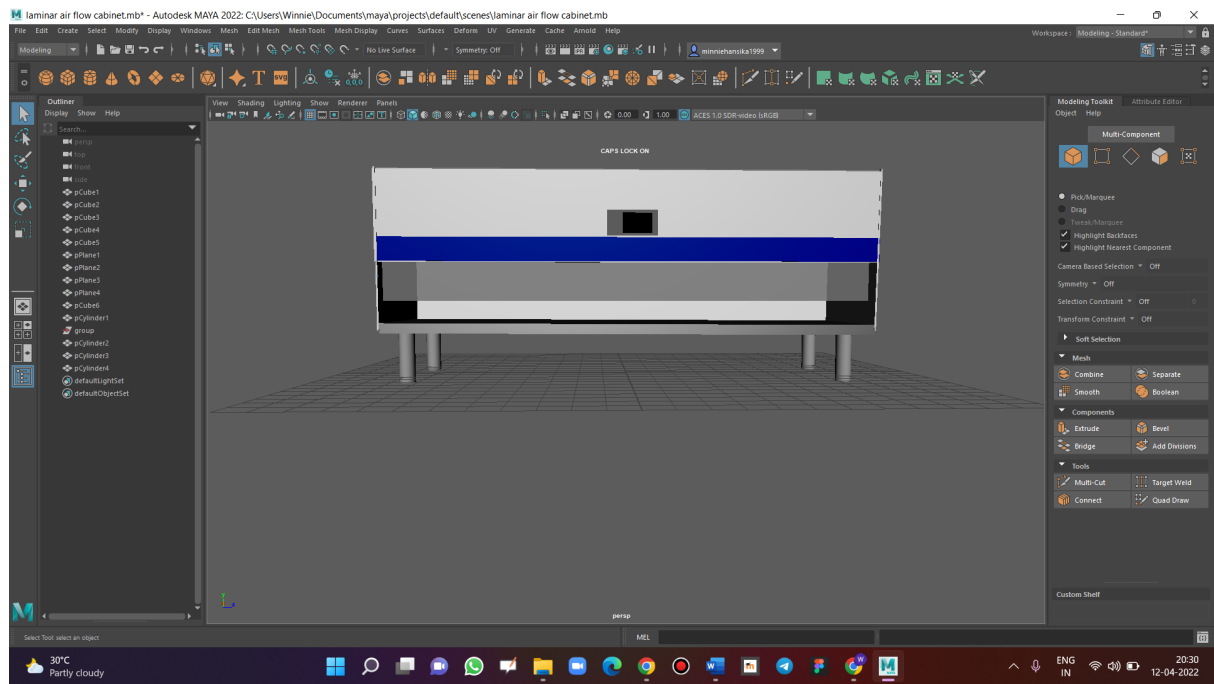
PETRIDISH



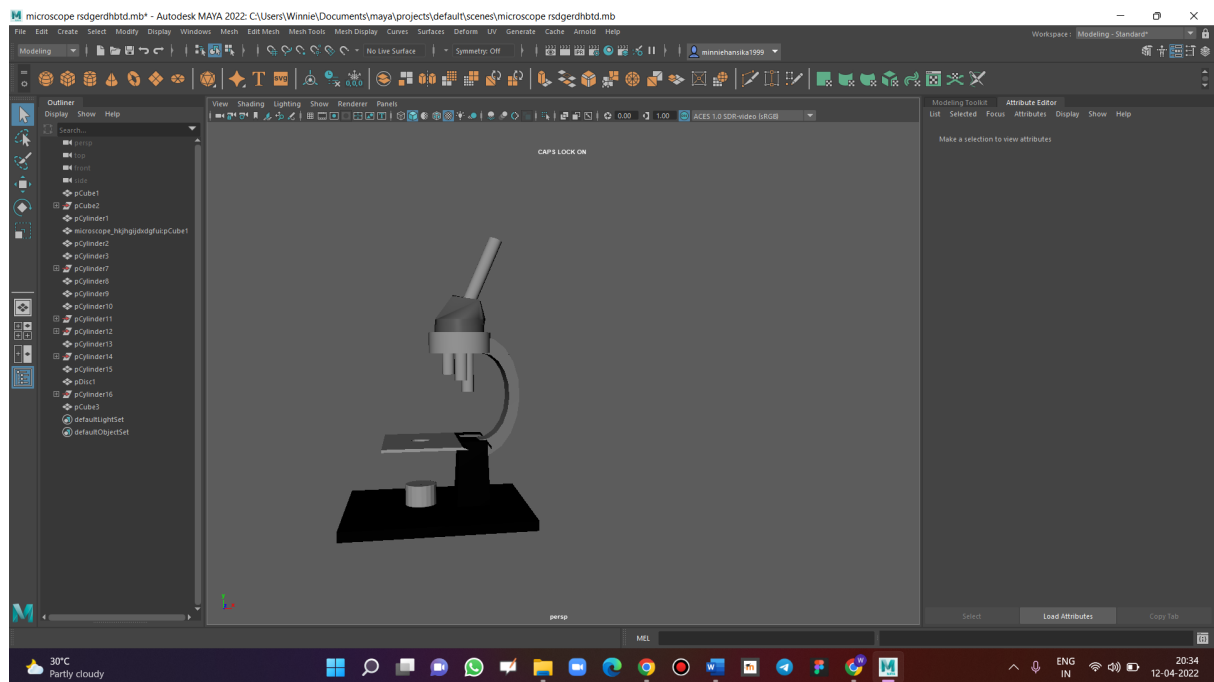
MICROCENTRIFUGE



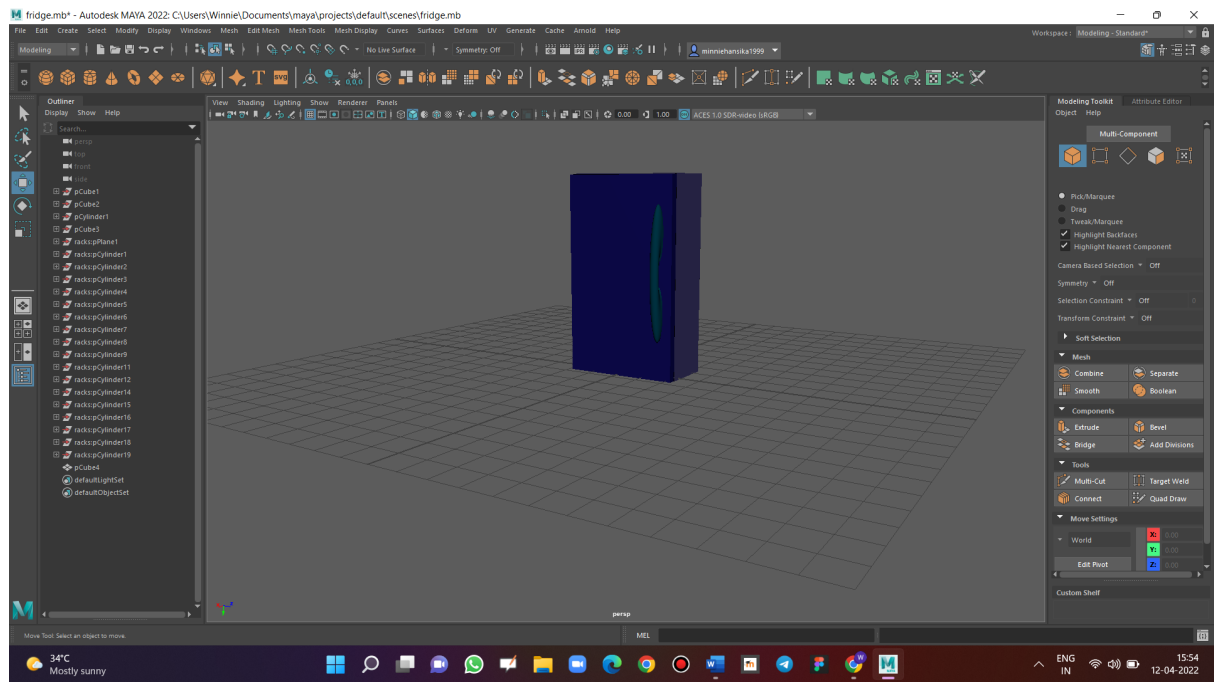
MICROCENTRIFUGE TUBES



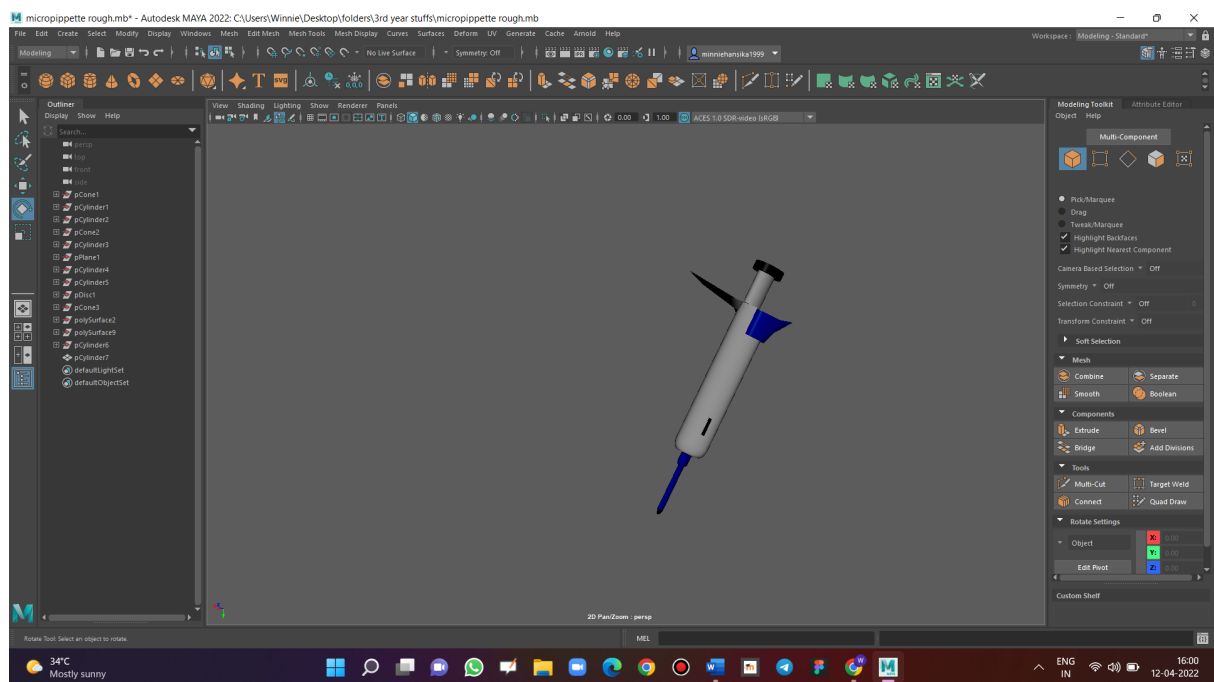
LAMINAR AIR FLOW HOOD



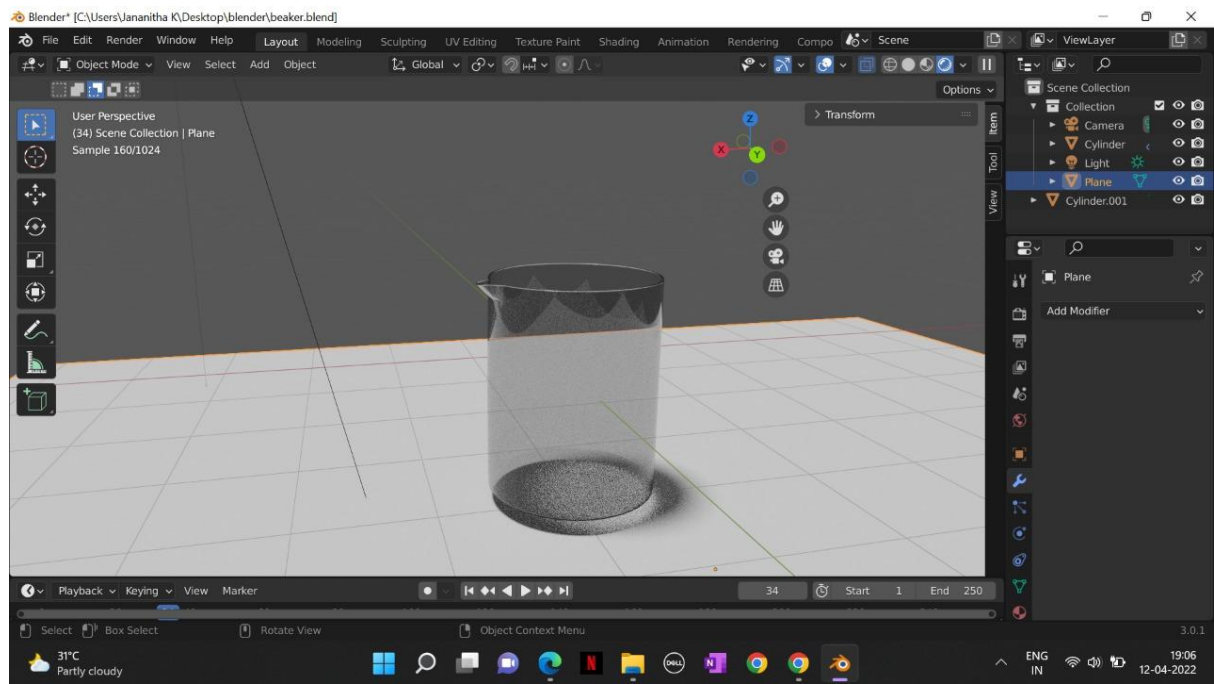
MICROSCOPE



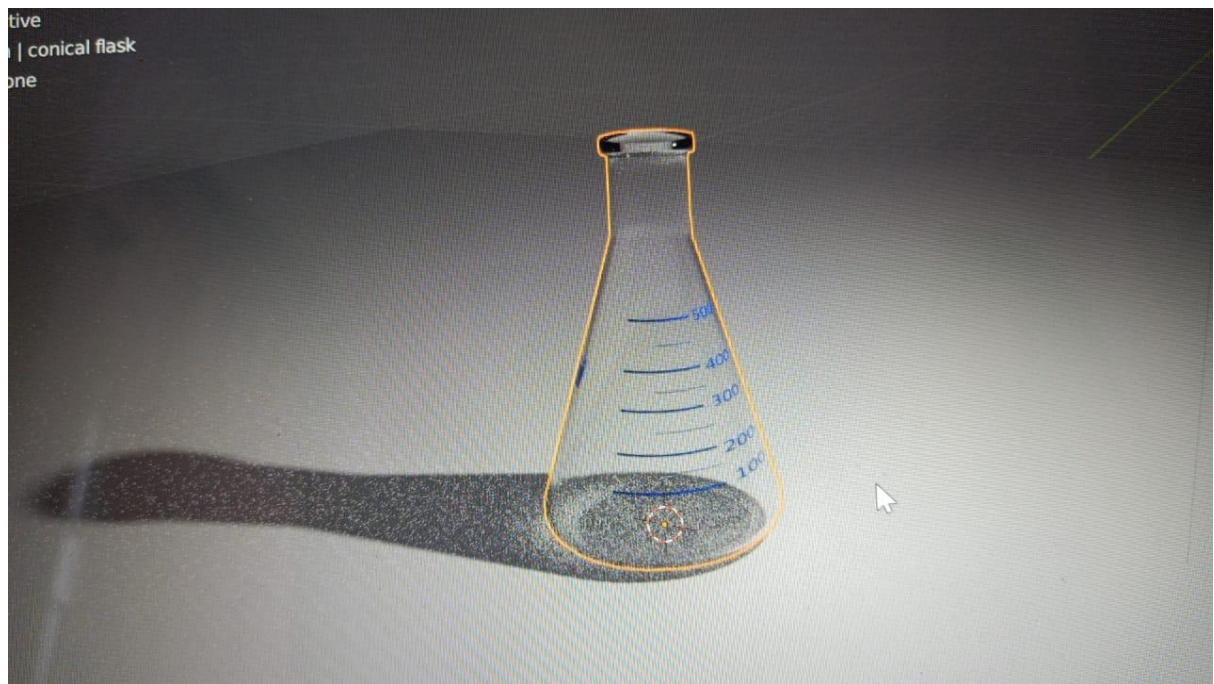
REFRIGERATOR



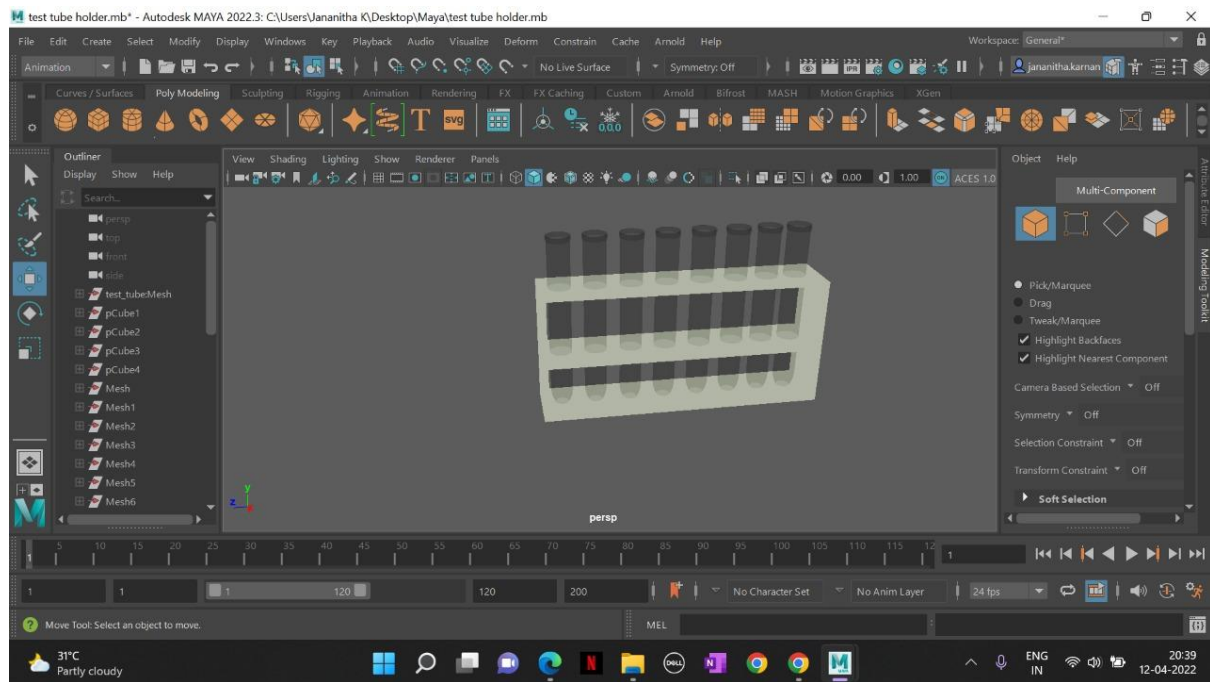
MICROPIPETTE



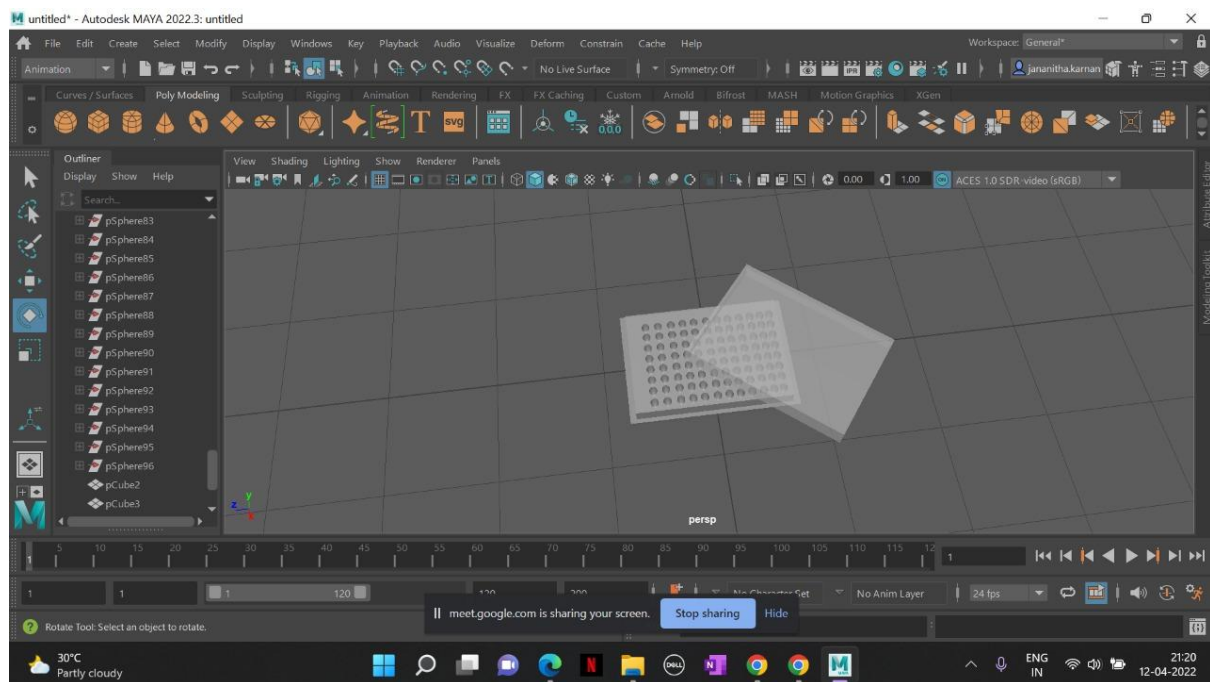
BEAKER



CONICAL FLASK

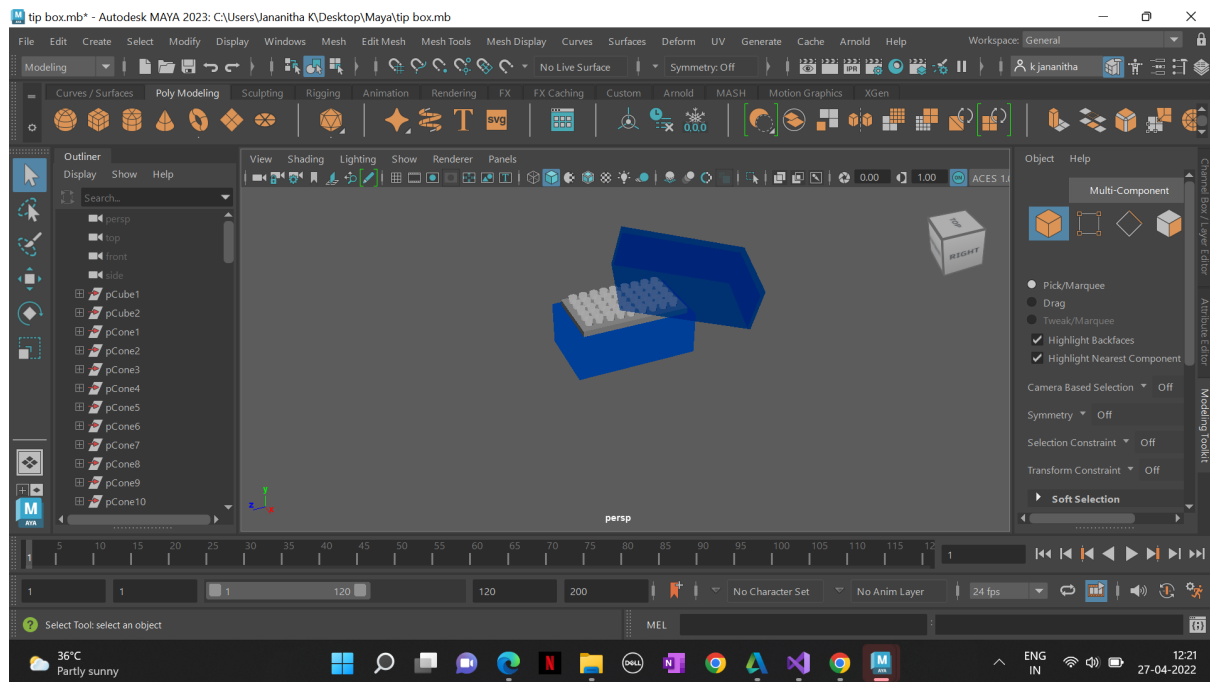


TEST TUBE HOLDER WITH TEST TUBES



96-WELL PLATE

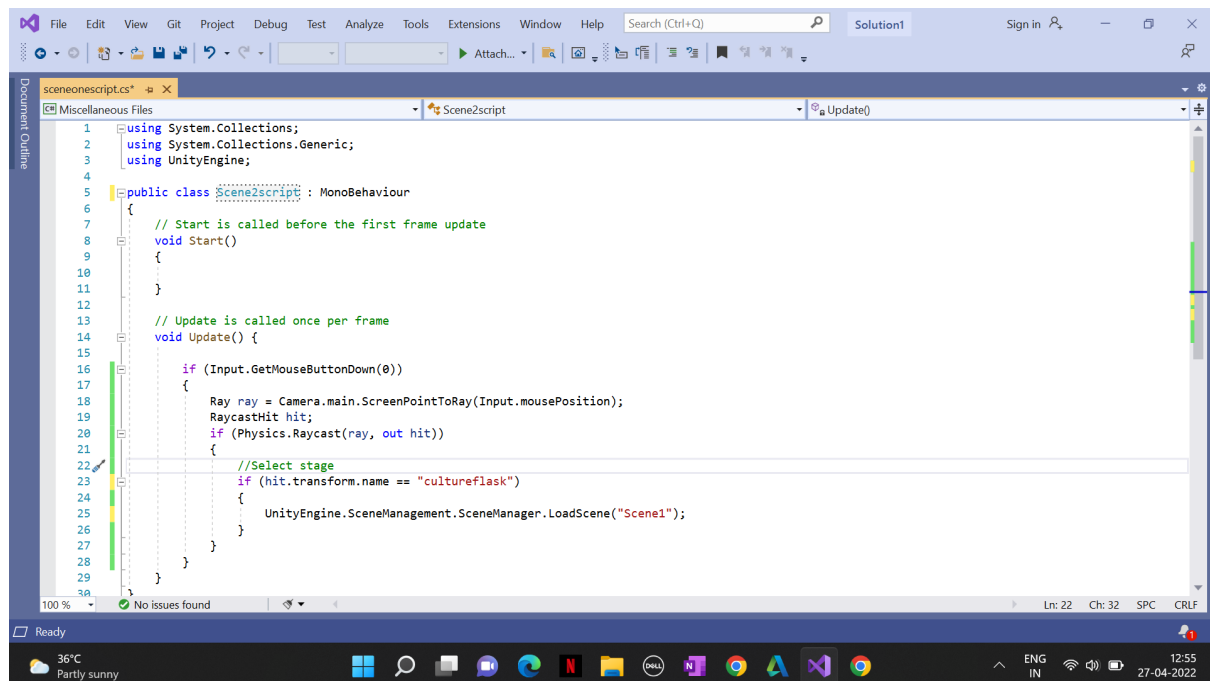




MICROPIPETTE TIP BOX WITH TIPS

5. CODING IN UNITY

The 3D models were successfully incorporated into the UNITY SOFTWARE and the game was built by coding on a scene to scene basis. The codes are used on particular game objects to change its position , scale or moving to the next scene . The language used in unity is C#. It is an object oriented scripting language . Different scripts were given for each scenes.



The Game for Cell Counting Experiment from the Animal Biotechnology Lab Syllabus of our University was created using the following codes:

The Procedure:

1,Debug:

To check if the 3D object gets detected.

```
Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);  
RaycastHit hit;  
if (Physics.Raycast(ray,out hit))  
{  
    Debug.Log(hit.transform.name);  
  
    //Select Stage  
    if (hit.transform.name == "laboratory final")  
    {  
  
    }  
}  
}
```

2.Start Script:

```
using System.Collections;  
using System.Collections.Generic;  
using UnityEngine;  
  
public class Startscript : MonoBehaviour  
{  
    // Start is called before the first frame update  
    void Start()  
    {  
  
    }  
  
    // Update is called once per frame  
    void Update() {  
  
        if (Input.GetMouseButtonDown(0))  
        {  
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```

RaycastHit hit;
if (Physics.Raycast(ray, out hit))
{
    //Select stage
    if (hit.transform.name == "Plane")
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene("Scene1");
    }
}
}
}

```

3.Scene1:

```

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

public class Scene1script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {

```

```

        //Select stage
        if (hit.transform.name == "labfinal")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene2");
        }
    }
}
}
}
}

```

4.Scene 2:

```

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

```

```

public class Scene2script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

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

```

```

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "lbr")
            {

```

```

        UnityEngine.SceneManagement.SceneManager.LoadScene("Scene3");
    }
}
}
}
}

```

5.Scene3:

```

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

```

```

public class Scene3script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

// Update is called once per frame

```

```

void Update() {

```

```

    if (Input.GetMouseButtonDown(0))

```

```

    {

```

```

        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

```

```

        RaycastHit hit;

```

```

        if (Physics.Raycast(ray, out hit))

```

```

        {

```

```

            //Select stage

```

```

            if (hit.transform.name == "labfinal")

```

```

            {

```

```

                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene4");

```

```

            }

```

```

        }

```

```
    }  
    }  
}
```

6.Scene4:

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

```
public class Scene4script : MonoBehaviour
```

```
{  
    // Start is called before the first frame update  
    void Start()  
    {  
  
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "labfinal")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene5");
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

7.Scene5:

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Scene5script : MonoBehaviour

{

 // Start is called before the first frame update

 void Start()

 {

 }

 // Update is called once per frame

 void Update() {

 if (Input.GetMouseButtonDown(0))

 {

 Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

 RaycastHit hit;

 if (Physics.Raycast(ray, out hit))

 {

 //Select stage

 if (hit.transform.name == "plane")

 {

 UnityEngine.SceneManagement.SceneManager.LoadScene("Scene6");

 }

 }

 }

 }

}

8.Scene6:

using System.Collections;

using System.Collections.Generic;

```
using UnityEngine;
```

```
public class Scene6script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "polySurface14")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene7");
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

9.Scene7:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene7script : MonoBehaviour
```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "polySurface14")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene8");
                }
            }
        }
    }
}

```

10.Scene8:

```

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

public class Scene8script : MonoBehaviour
{
    // Start is called before the first frame update

```

```

void Start()
{

}

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene9");
            }
        }
    }
}

```

11.Scene9:

```

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

public class Scene9script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

```

```

}

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene10");
            }
        }
    }
}

```

12.Scene10:

```

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

public class Scene10script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

    // Update is called once per frame

```

```

void Update() {

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene11");
            }
        }
    }
}

```

13.Scene11:

```

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

public class Scene11script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))

```

```

{
    Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
    RaycastHit hit;
    if (Physics.Raycast(ray, out hit))
    {
        //Select stage
        if (hit.transform.name == "polySurface14")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene12");
        }
    }
}
}

```

14.Scene12:

```

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

```

```

public class Scene12script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

// Update is called once per frame

```

```

void Update() {

```

```

    if (Input.GetMouseButtonDown(0))

```

```

    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
    }
}

```

```

        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene13");
            }
        }
    }
}

```

15.Scene13:

```

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

```

```

public class Scene13script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

// Update is called once per frame

```

```

void Update() {

```

```

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage

```

```

        if (hit.transform.name == "lbr")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene14");
        }
    }
}
}
}
}
}

```

16.Scene14:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene14script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "labfinal")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene15");
```

```

    }
    }
    }
}

```

17.Scene15:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene15script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "polySurface14")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene16");
```

```
                }
```

```
            }
```

```
        }
```

```
}  
}
```

18.Scene16:

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

```
public class Scene16script : MonoBehaviour  
{  
    // Start is called before the first frame update  
    void Start()  
    {  
  
    }  
  
    // Update is called once per frame  
    void Update() {  
  
        if (Input.GetMouseButtonDown(0))  
        {  
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);  
            RaycastHit hit;  
            if (Physics.Raycast(ray, out hit))  
            {  
                //Select stage  
                if (hit.transform.name == "polySurface14")  
                {  
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene17");  
                }  
            }  
        }  
    }  
}
```

19.Scene17:

```

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

public class Scene17script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "polySurface14")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene18");
                }
            }
        }
    }
}

```

20.Scene18:

```

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

```

```

public class Scene18script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "polySurface14")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene19");
                }
            }
        }
    }
}

```

21.Scene19:

```

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

public class Scene19script : MonoBehaviour
{

```

```

// Start is called before the first frame update
void Start()
{

}

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene20");
            }
        }
    }
}

```

22.Scene20:

```

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

public class Scene20script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

```

```

}

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene21");
            }
        }
    }
}

```

23.Scene21:

```

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

public class Scene21script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene22");
            }
        }
    }
}

```

24.Scene22:

```

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

public class Scene22script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

```

```

if (Input.GetMouseButtonDown(0))
{
    Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
    RaycastHit hit;
    if (Physics.Raycast(ray, out hit))
    {
        //Select stage
        if (hit.transform.name == "labfinal")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene23");
        }
    }
}
}

```

25.Scene23:

```

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

```

```

public class Scene23script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

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

```

```

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

```

```

RaycastHit hit;
if (Physics.Raycast(ray, out hit))
{
    //Select stage
    if (hit.transform.name == "labfinal")
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene("Scene24");
    }
}
}
}

```

26.Scene24:

```

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

public class Scene24script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {

```



```

        UnityEngine.SceneManagement.SceneManager.LoadScene("Scene26");
    }
}
}
}
}

```

28.Scene26:

```

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

```

```

public class Scene26script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

// Update is called once per frame

```

```

void Update() {

```

```

    if (Input.GetMouseButtonDown(0))

```

```

    {

```

```

        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

```

```

        RaycastHit hit;

```

```

        if (Physics.Raycast(ray, out hit))

```

```

        {

```

```

            //Select stage

```

```

            if (hit.transform.name == "polySurface14")

```

```

            {

```

```

                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene27");

```

```

            }

```

```

        }

```

```
    }  
    }  
}
```

29.Scene27:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene27script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "labfinal")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene28");
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

30.Scene28:

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Scene28script : MonoBehaviour

{

 // Start is called before the first frame update

 void Start()

 {

 }

 // Update is called once per frame

 void Update() {

 if (Input.GetMouseButtonDown(0))

 {

 Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

 RaycastHit hit;

 if (Physics.Raycast(ray, out hit))

 {

 //Select stage

 if (hit.transform.name == "polySurface14")

 {

 UnityEngine.SceneManagement.SceneManager.LoadScene("Scene29");

 }

 }

 }

 }

}

31.Scene29:

using System.Collections;

using System.Collections.Generic;

```
using UnityEngine;
```

```
public class Scene29script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "polySurface14")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene30");
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

32.Scene30:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene30script : MonoBehaviour
```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "polySurface14")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene31");
                }
            }
        }
    }
}

```

33.Scene31:

```

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

public class Scene31script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()

```

```

{

}

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene32");
            }
        }
    }
}

```

34.Scene32:

```

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

public class Scene32script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

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

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "polySurface14")
            {
                UnityEngine.SceneManagement.SceneManager.LoadScene("Scene33");
            }
        }
    }
}

```

35.Scene33:

```

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

public class Scene33script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

```

```

if (Input.GetMouseButtonDown(0))
{
    Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
    RaycastHit hit;
    if (Physics.Raycast(ray, out hit))
    {
        //Select stage
        if (hit.transform.name == "polySurface14")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene34");
        }
    }
}
}

```

36.Scene34:

```

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

public class Scene34script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {

```

```

Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
RaycastHit hit;
if (Physics.Raycast(ray, out hit))
{
    //Select stage
    if (hit.transform.name == "labfinal")
    {
        UnityEngine.SceneManagement.SceneManager.LoadScene("Scene35");
    }
}
}
}
}

```

37.Scene35:

```

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

public class Scene35script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))

```

```

    {
        //Select stage
        if (hit.transform.name == "polySurface14")
        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene36");
        }
    }
}

```

38.Scene36:

```

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

```

```

public class Scene36script : MonoBehaviour

```

```

{
    // Start is called before the first frame update
    void Start()
    {

    }
}

```

```

// Update is called once per frame

```

```

void Update() {

```

```

    if (Input.GetMouseButtonDown(0))
    {
        Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
        RaycastHit hit;
        if (Physics.Raycast(ray, out hit))
        {
            //Select stage
            if (hit.transform.name == "labfinal")

```

```

        {
            UnityEngine.SceneManagement.SceneManager.LoadScene("Scene37");
        }
    }
}
}
}
}

```

39.Scene37:

```

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

public class Scene37script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "labfinal")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene38");
                }
            }
        }
    }
}

```

```

    }
}
}
}

```

40.Scene38:

```

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

```

```

public class Scene38script : MonoBehaviour
{

```

```

    // Start is called before the first frame update

```

```

    void Start()

```

```

    {

```

```

    }

```

```

    // Update is called once per frame

```

```

    void Update() {

```

```

        if (Input.GetMouseButtonDown(0))

```

```

        {

```

```

            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);

```

```

            RaycastHit hit;

```

```

            if (Physics.Raycast(ray, out hit))

```

```

            {

```

```

                //Select stage

```

```

                if (hit.transform.name == "labfinal")

```

```

                {

```

```

                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene39");

```

```

                }

```

```

            }

```

```

        }

```

```

    }

```

```
}
```

41.Scene39:

```
using System.Collections;
```

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

```
using UnityEngine;
```

```
public class Scene39script : MonoBehaviour
```

```
{
```

```
    // Start is called before the first frame update
```

```
    void Start()
```

```
    {
```

```
    }
```

```
    // Update is called once per frame
```

```
    void Update() {
```

```
        if (Input.GetMouseButtonDown(0))
```

```
        {
```

```
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
```

```
            RaycastHit hit;
```

```
            if (Physics.Raycast(ray, out hit))
```

```
            {
```

```
                //Select stage
```

```
                if (hit.transform.name == "labfinal")
```

```
                {
```

```
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Scene40");
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

42.Scene40:

```
using System.Collections;
```

```

using System.Collections.Generic;
using UnityEngine;

public class Scene40script : MonoBehaviour
{
    // Start is called before the first frame update
    void Start()
    {

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "labfinal")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("End");
                }
            }
        }
    }
}

```

43.End Script:

```

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

```

```

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

    }

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

        if (Input.GetMouseButtonDown(0))
        {
            Ray ray = Camera.main.ScreenPointToRay(Input.mousePosition);
            RaycastHit hit;
            if (Physics.Raycast(ray, out hit))
            {
                //Select stage
                if (hit.transform.name == "labfinal")
                {
                    UnityEngine.SceneManagement.SceneManager.LoadScene("Start");
                }
            }
        }
    }
}

```

OUTPUT:

Output has been demonstrated as a Video.

References:

<https://www.udemy.com/course/learnunity3d/>

<https://www.udemy.com/course/introduction-to-autodesk-maya-2016/>

Sathyabama Animal Biotechnology Lab Manual