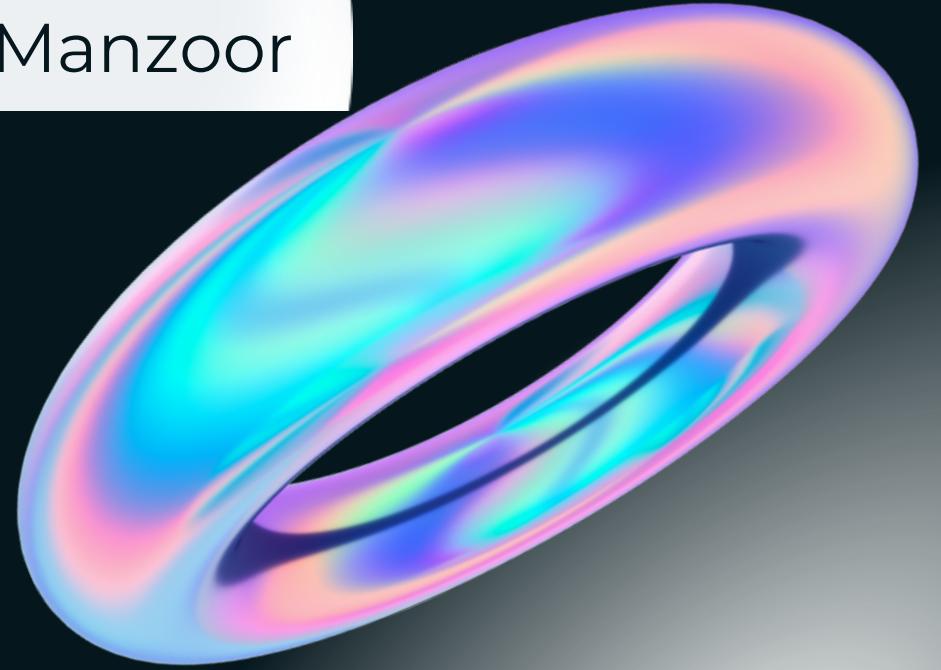




Room Designer 3000

CPE Term Project - Abdullah Alhussni & Sameer Manzoor



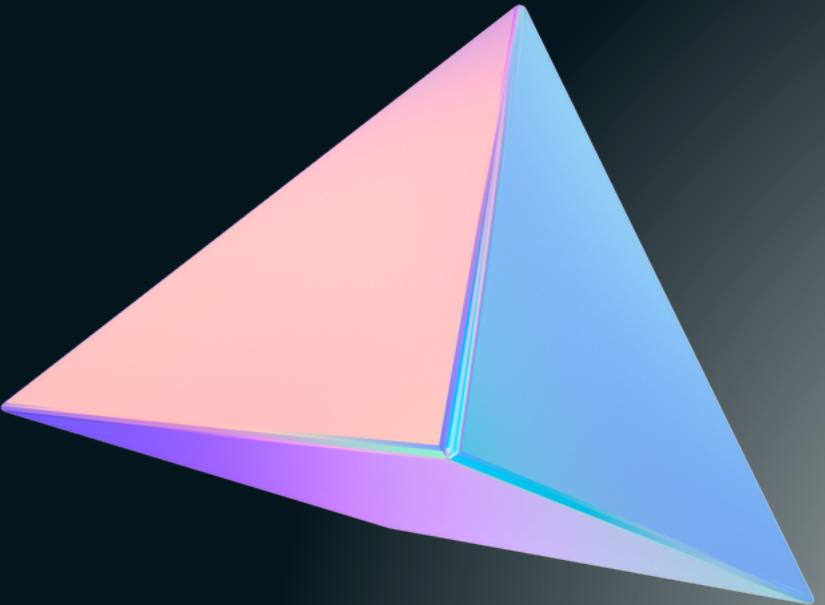
Why We Chose Room Designing?

- Inspired by personal experiences
- It is a lot of work to re arrange a room without visualizing the final look
- A room designing software has a lot of scope in today's world for interior designers and for the public in general



Why we chose VR?

- Visualizing the final design is much easier in 3D
- VR gives a much realistic final product



Why We Chose Unity?

- Unity is the biggest cross platform game engine responsible for some of the biggest games like "Fall Guys", "among us" and many more
- Unity is very user friendly and is easy to learn to work on

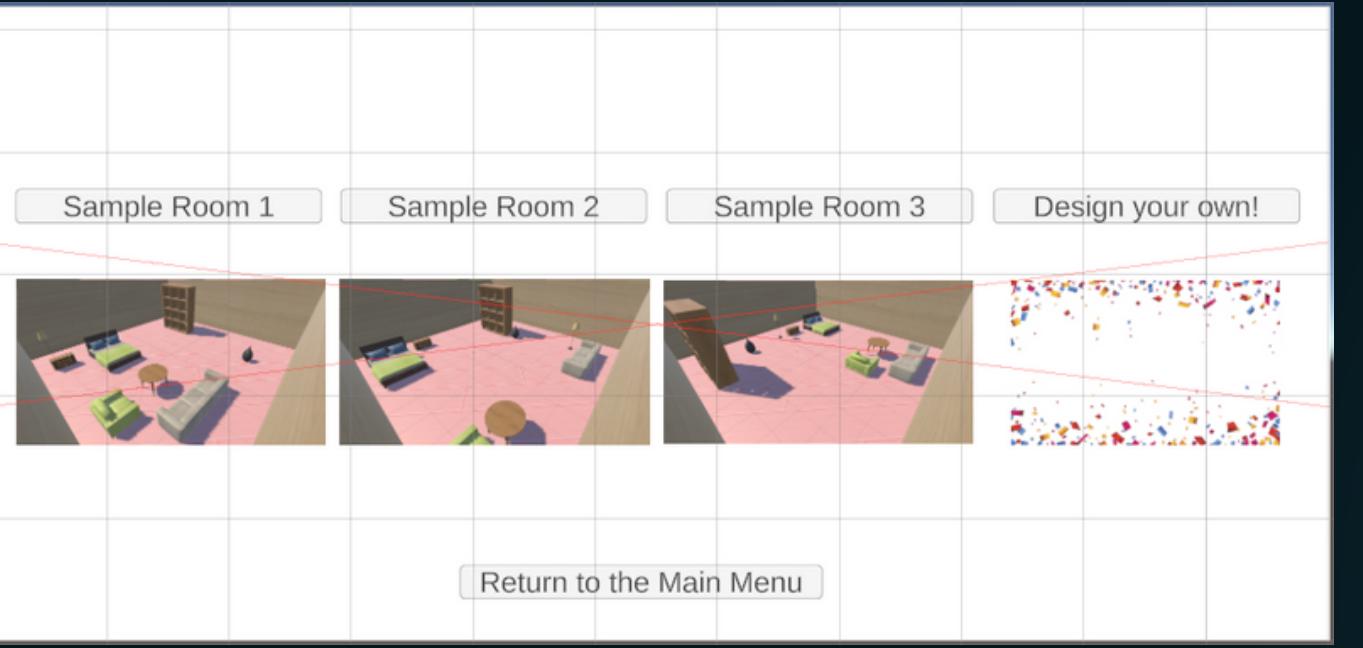


Application

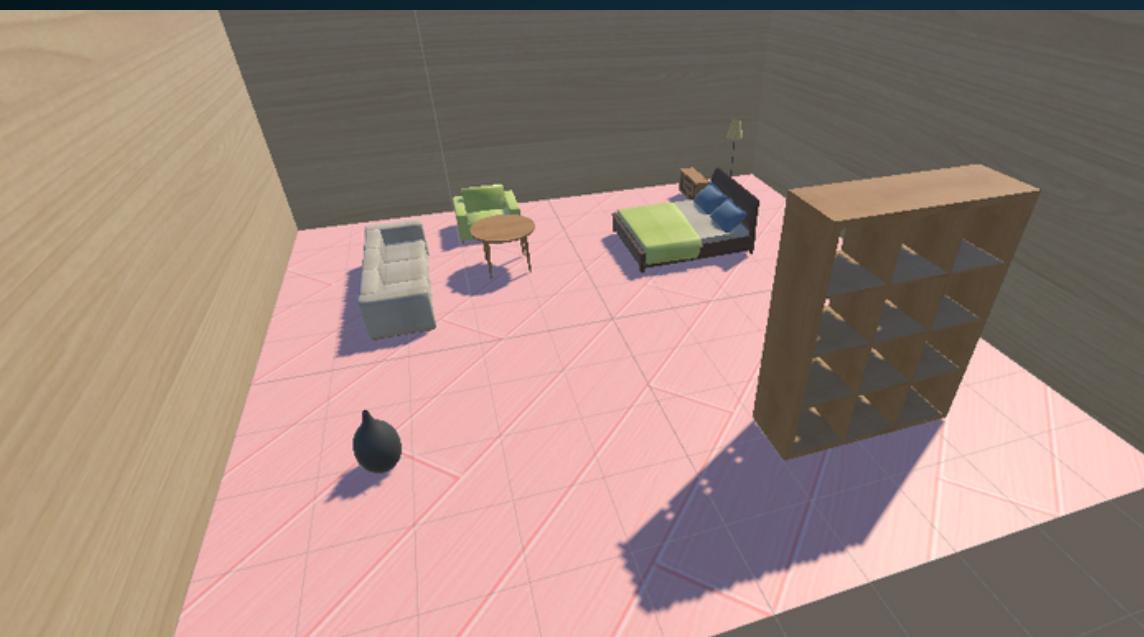
Start up menu



Choosing menu



Sample room



Coding

Implementing the function for each button
in the app

```
using UnityEngine;
using UnityEngine.UI;
using UnityEngine.SceneManagement;

public class Options : MonoBehaviour
{
    public void GoToRoom1()
    {
        SceneManager.LoadScene("SampleRoom1", LoadSceneMode.Single);
    }

    public void GoToRoom2()
    {
        SceneManager.LoadScene("SampleRoom2", LoadSceneMode.Single);
    }

    public void GoToRoom3()
    {
        SceneManager.LoadScene("SampleRoom3", LoadSceneMode.Single);
    }

    public void GoToDesigner()
    {
        SceneManager.LoadScene("Designer", LoadSceneMode.Single);
    }

    public void GoToChoose ()
    {
        SceneManager.LoadScene("Choose", LoadSceneMode.Single);
    }

    public void ReturnToMenu ()
    {
        SceneManager.LoadScene("MainMenu", LoadSceneMode.Single);
    }

    public void QuitApp ()
    {
        Application.Quit();
    }
}
```

Coding

Updating the x and y coordinates when scroll bar is used for any furniture

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

public class NewBehaviourScript : MonoBehaviour
{
    public GameObject scrollx;
    public GameObject scrolly;
    private Vector3 start;

    // Start is called before the first frame update
    void Start()
    {
        start = transform.position;
    }

    // Update is called once per frame
    void Update()
    {
        float xbar = scrollx.GetComponent<Scrollbar>().value;
        float ybar = scrolly.GetComponent<Scrollbar>().value;
        float x = 4 * (2 * xbar - 1);
        float y = 4 * (2 * ybar - 1);
        transform.position = start + new Vector3(x, 0, y);
    }
}
```

Future plans

Make it more user friendly

- Changing the furniture color
- Changing the furniture material
- Changing the color of the walls
- Asking the user for the dimensions of their room, furniture,etc

Demonstration

Now you get a chance to try the software

Q & A

Ask us any questions you may have



Thank You

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