

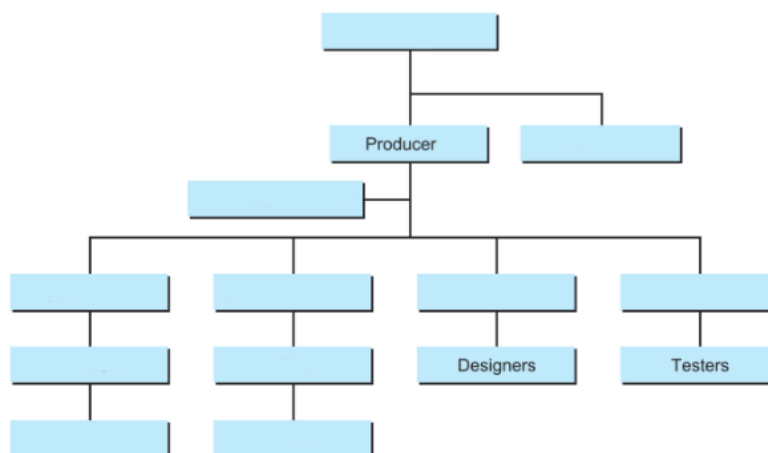
EIGE Trainer

Fragen zur Zentralübung sind mir leider nicht möglich, ich keinen Zugriff auf die Folien aus diesem Semester habe.

Vorlesung

1. What are basic components of a game?
2. What are some factors that led to the game crash in the 1980s?
3. If you were to port a game from one platform to another, what are some things that would need to be changed?
4. What is the difference between a Developer and a Publisher?
5. What elements should a developer include in a pitch to a game publisher?
6. Why is it important for developers and publishers to maintain a good working relationship?
7. What are the consequences of a dysfunctional working relationship between publisher and developer?
8. What are the differences between an independent game developer and one that is owned by a publisher? What are the pros and cons of each?
9. What does it mean to vet a developer? What type of information is needed in order to vet a developer?
10. What are the benefits of using a work-for-hire contract for an external vendor who is contributing work to a game?
11. What is an NDA? Describe the two types of NDAs.
12. How does an NDA affect something that is a trade secret?
13. What are the major roles that must be filled on every game development team?
14. What is the difference between a publisher producer and a developer producer? Who do they interface with during game development?
15. What are some ways to structure large game development teams?
16. What are some ways to structure small game development teams?
17. How do marketing and PR fit into the game development cycle?
18. Discuss the qualities of a good leader.
19. Name the three basic leadership archetypes.
20. Name skills and traits of a good lead engineer.
21. Name skills and traits of a good lead artist.
22. Name skills and traits of a good lead designer.
23. What is the difference between a group and a team?
24. What are some team-building methods?
25. Lack of Motivation might disrupt a production. What are the warning sign of low moral?
26. What are some ways written communication can be improved?
27. Describe the active-listening technique.
28. Why is it important to be aware of nonverbal communication?
29. Describe the different types of Communication.
30. What are communication norms and why are they important?

31. What are the four main phases in the game production cycle and what is the main purpose of each one?
32. Name the key phases for each main phase and their purpose.
33. What are some common complaints about the brainstorming process? How do you conduct a successful brainstorming session?
34. How do you define and categorize risks on a project?
35. What are the goals of prototyping? What types of prototypes can be created?
36. What is a SWOT analysis?
37. What are the differences between a SWOT analysis and a competitive analysis?
38. When working with an existing IP, what does the writer need to research in order to make sure the game is consistent with the elements already established in the IP?
39. What does the writer need to consider when creating a game character?
40. How can relationships with other characters impact the player's character?
41. What types of elements need to be considered when developing a game setting?
42. Why doesn't a classic movie script format work well for documenting a game's story?
43. What types of features will be defined during the game requirements phase? Discuss what each type contains.
44. What is a milestone?
45. What are the key milestones during a game development cycle? How are they defined?
46. What is the production pipeline and what are some key elements that are necessary for a successful production pipeline?
47. What types of art, design, and technical documentation are written during the game requirements phase?
48. What is the purpose of a game plan?
49. What is the purpose of creating an initial production schedule?
50. What are the elements that must be included in a useful schedule? How do these elements impact the schedule?
51. What are the pros and cons of outsourcing and what types of things can be outsourced?
52. When is a game design documentation created? What does it include?
53. What are the pros and cons of developing a game for an existing game?
54. The following picture shows a structure for a large developer team. Fill in the blank boxes.



55. What is a feature creep?
56. Name three game genres and describe them in 2 to 3 sentences.
57. What are the factors to consider when creating a game concept?

Übung

1. What is a Gizmo?
2. What are the advantages of Tiling?
3. What are the differences between Update(), LateUpdate() and FixedUpdate()?
4. What's the difference between an orthographic and a perspective camera?
5. What are Coroutines?
6. What is the *SendMessage(string methodName, object value, SendMessageOptions options)* method used for and how does it work?
7. Why should you avoid using the SendMessage method?
8. Describe what the following code does

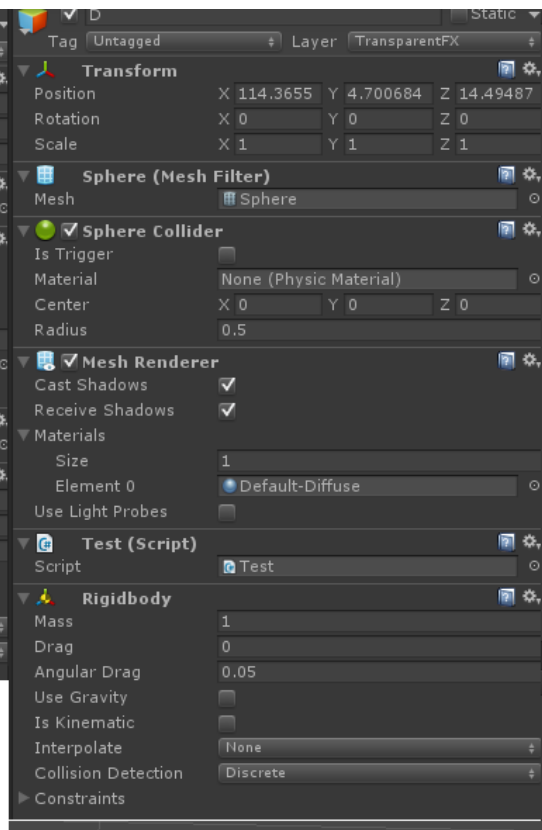
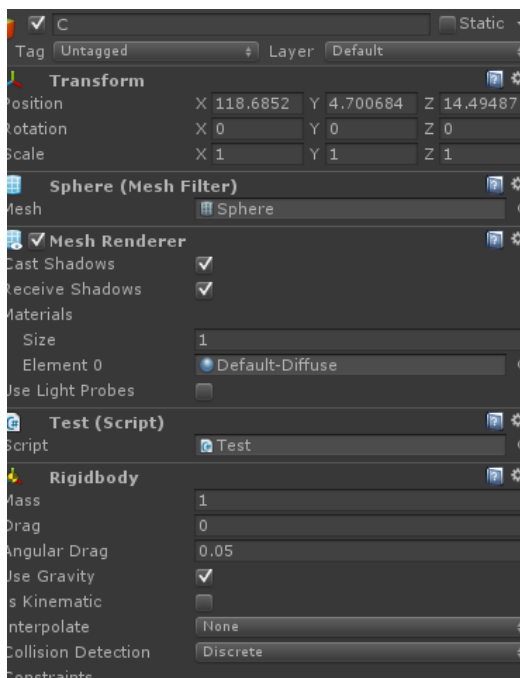
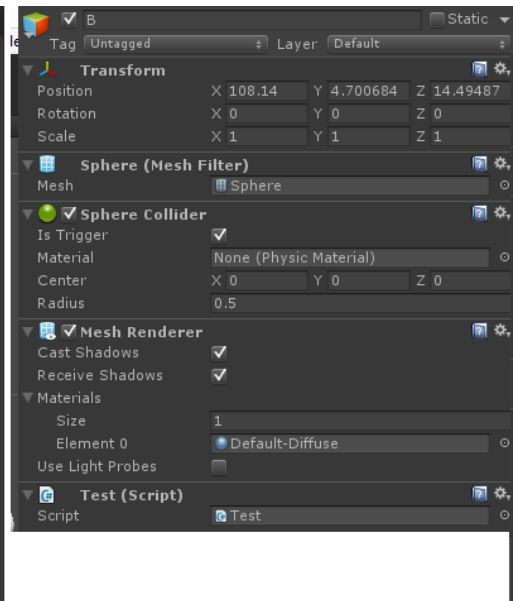
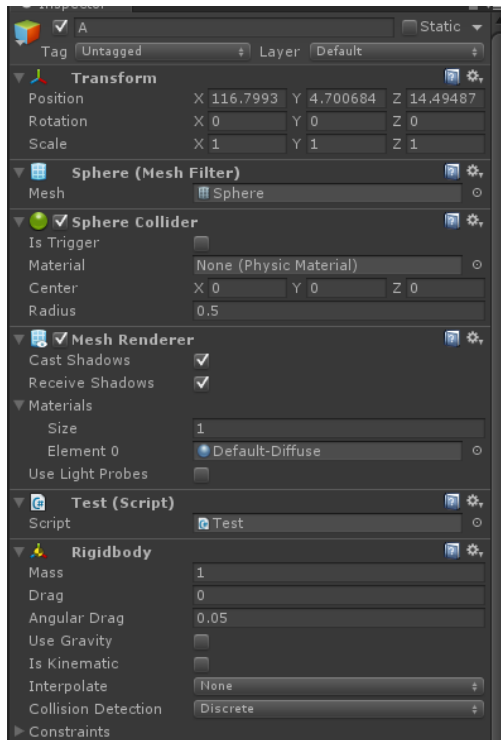
```
public float xy;
// Use this for initialization
0 references
void Start () {
}
// Update is called once per frame
0 references
void Update () {
    transform.Translate(Vector3.up * Time.deltaTime * xy * Input.GetAxis("Horizontal"));
}
```

9. The next pictures show Spheres with different Components and a Collision Matrix.

The image shows a Unity Inspector window on the left and a C# script on the right. The Inspector displays a Collision Matrix for a sphere with the following components: Default, TransparentFX, Ignore Raycast, Water, HUDBlue, HUDRed, HUDYellow, and HUDGreen. Each component has a set of checkboxes for collision with other objects. The C# script, named 'Test', inherits from 'MonoBehaviour' and implements 'OnTriggerEnter(Collider other)' and 'OnCollisionEnter(Collision other)' methods. Both methods use 'Debug.Log' to print the name of the object that triggered the event.

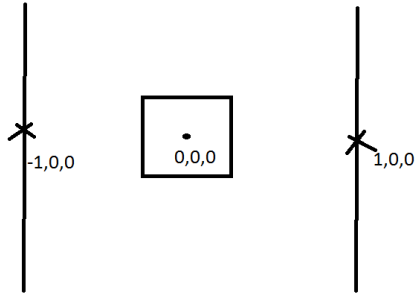
Component	Default	TransparentFX	Ignore Raycast	Water	HUDBlue	HUDRed	HUDYellow	HUDGreen
Default	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TransparentFX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ignore Raycast	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HUDBlue	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HUDRed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HUDYellow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HUDGreen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

```
public class Test : MonoBehaviour {
    0 references
    void OnTriggerEnter(Collider other)
    {
        if (other.name == "A"){Debug.Log("A");}
        else if (other.name == "B"){Debug.Log("B");}
        else if (other.name == "C"){Debug.Log("C");}
        else if (other.name == "D"){Debug.Log("D");}
    }
    0 references
    void OnCollisionEnter(Collision other)
    {
        if (other.gameObject.name == "A"){Debug.Log("A");}
        else if (other.gameObject.name == "B"){Debug.Log("B");}
        else if (other.gameObject.name == "C") { Debug.Log("C");}
        else if (other.gameObject.name == "D"){Debug.Log("D");}
    }
}
```



What's shown on the Console when the following Objects meet?

A->B, A->C, A->D, B->C, C->D

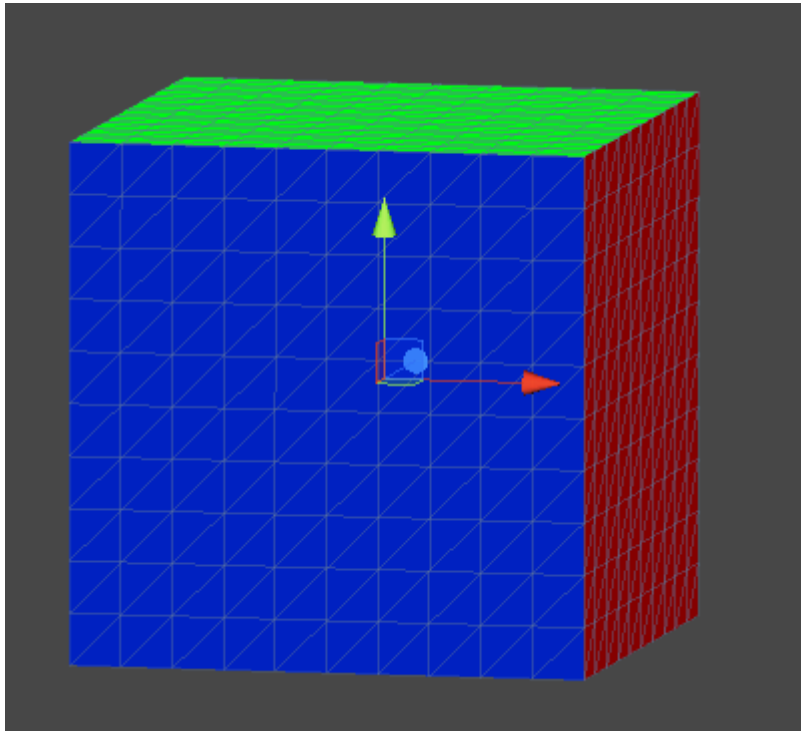


10. The picture shows a cube at the position 0,0,0. The Player can move the cube up/down and left/right.

Implement the following assignments:

- If the Player moves outside of the indicated borders, he will be put back to the origin(0,0,0)
- If the Player moves outside of the indicated borders, he will move back in from the other side. The y component should remain the same after the ScreenWarp.
- The Player should not be able to move outside those borders.

11. The opposite faces of the cube have the same color as their counterparts.



Draw a cube and its colors for each rotation a), b)

- $x = 90, y = 90, z = 90$
- $x = 180, y = -90, z = 270$

12. The Scripts ABC and XYZ are both Components of the same gameobject
Replace SendMessage with your own code so that the result remains the same.

```
0 references
public class ABC : MonoBehaviour {
    0 references
    void Start()
    {
        gameObject.SendMessage("myFunction", SendMessageOptions.DontRequireReceiver);
    }
    0 references
    void myFunction()
    {
        Debug.Log("ABCFunction");
    }
}

0 references
public class XYZ : MonoBehaviour {
    0 references
    void myFunction()
    {
        Debug.Log("XYZFunction");
    }
}
```

13. Finish implementing the circular buffer

```
public class CircularBuffer {
    private string[] list;
    private int end;
    private int start;
    private int size;

    0 references
    public CircularBuffer(int _size)
    {
        size = _size;
        list = new string[size];
        start = 0;
        end = 0;
    }

    0 references
    public void Push(string str)
    {
        //TODO Put an object into the Buffer
    }

    0 references
    public string Pop()
    {
        //TODO returns the last object put into the buffer and deletes it or lets it be overwritten with the next push call
        return null;
    }

    0 references
    public void Clear()
    {
        //TODO Deletes everything in the buffer
    }

    0 references
    public int Count
    {
        //TODO returns the elements in the buffer
    }
}
```

14. What does [System.Serializable] do? What's the advantage of using it? Name a specific example.

15. Implement a Menu Item in C# that lets you move all the selected objects onto the $z = 0$ plane. Restriction: This Menu Item should only be selectable for objects which have a rigidbody attached to it.