



TECH 421 - Future of Digital Media

TECH 3706 - AR/VR in Architectural Environments



Today is a catch up day....

Your Sketch Must:

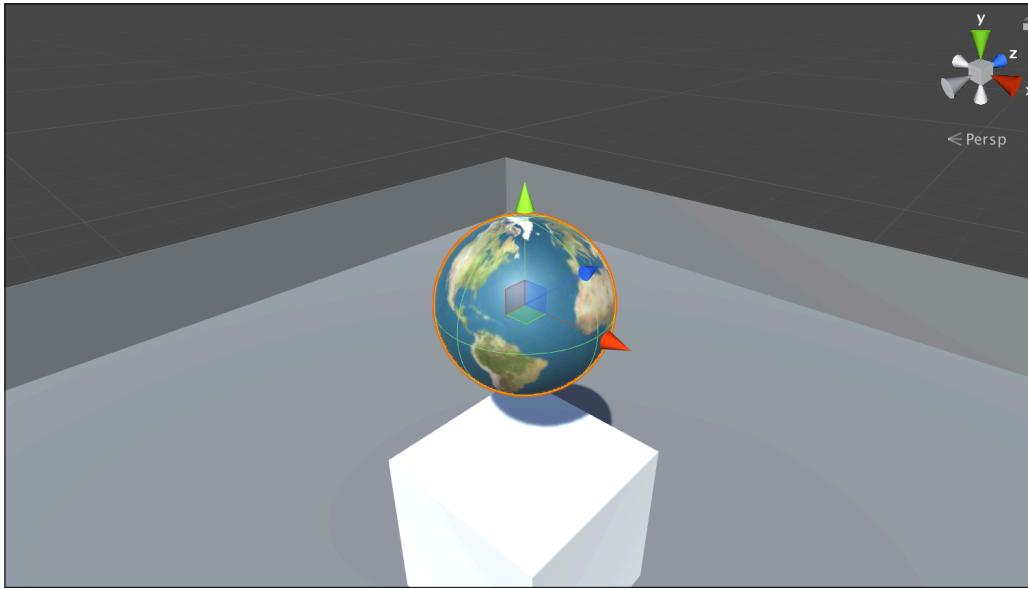
Use a new **Prefab**

Contain at least one new **Script**

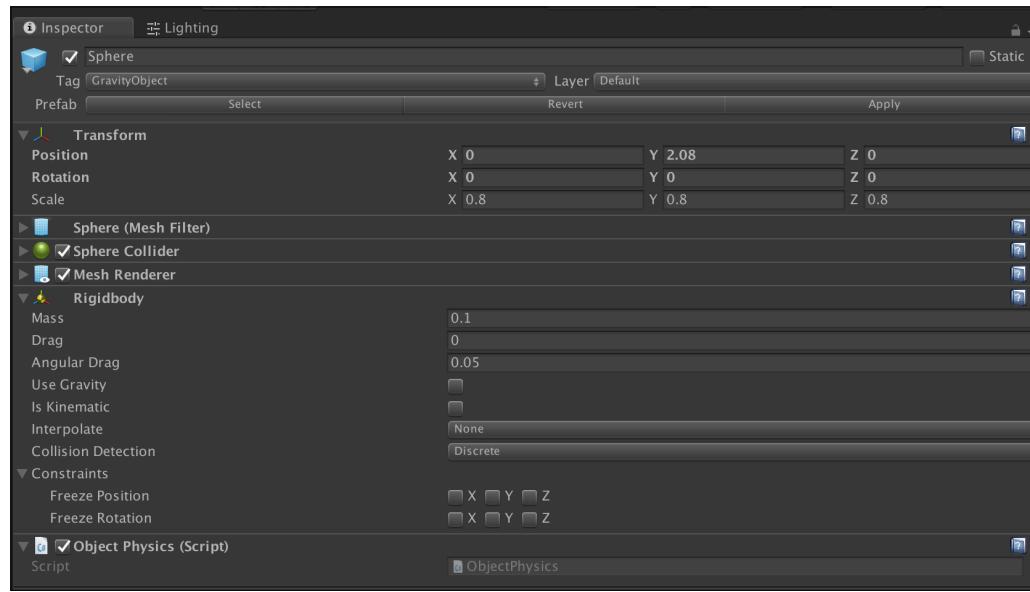
Contain at least one **Animation**

React to some kind of **Input**

Use something we have not yet learned



Game Objects



Game Object Components

```
float xPos = Random.Range(xMin, xMax);
float yPos = Random.Range(yMin, yMax);
float zPos = Random.Range(zMin, zMax);

Instantiate(shapeToCopy,
    new Vector3(xPos, yPos, zPos),
    Quaternion.identity);
```

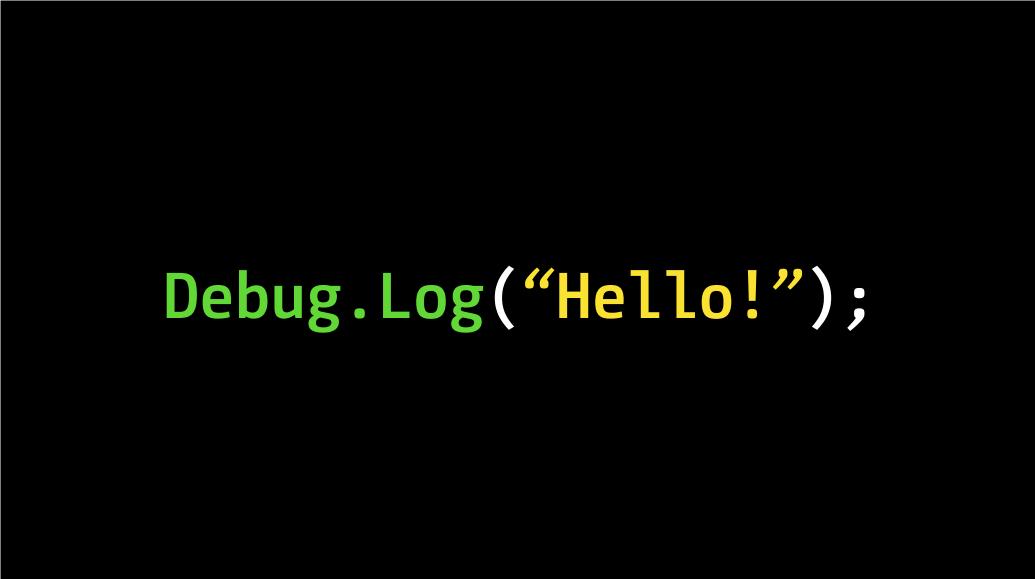
Instantiation

Random.Range

```
void OnTriggerEnter(Collider c) {
    // Do something here
}

void OnCollisionEnter(Collision c) {
    // Do something here
}
```

Collisions (hard contact) vs Triggers (passes through)



```
Debug.Log("Hello!");
```

Debug.Log is your friend!

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Contain at least one new **Script**

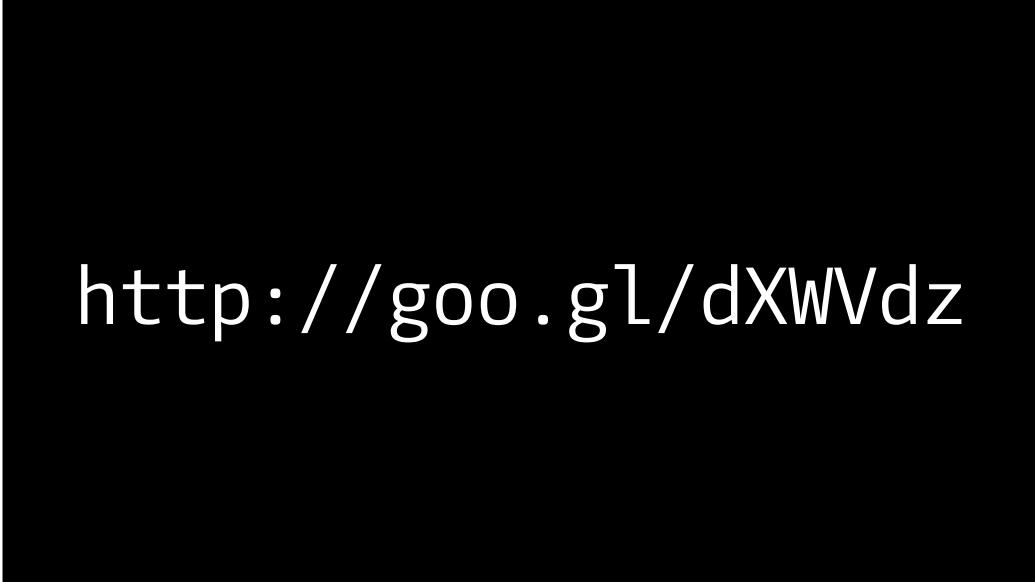
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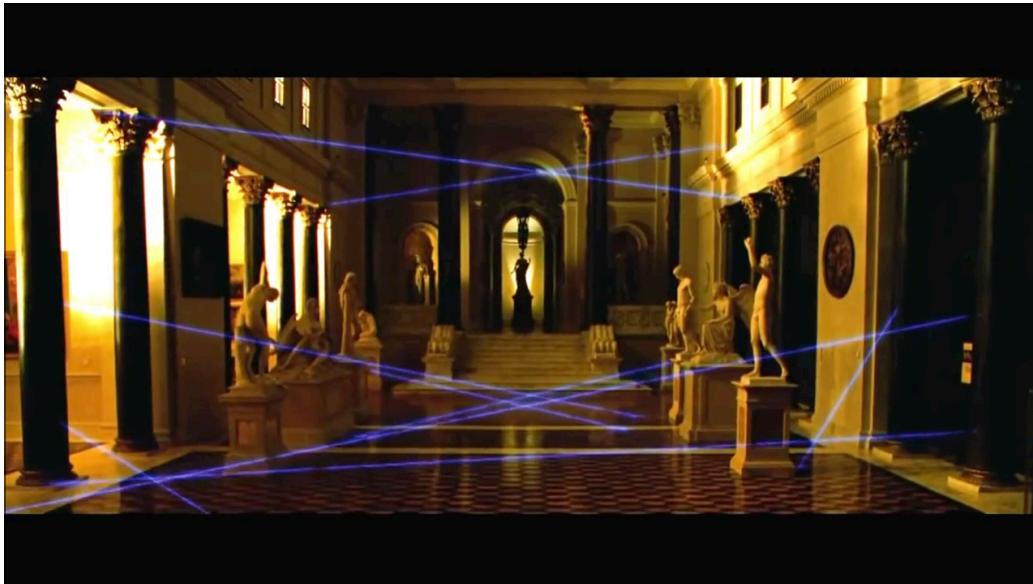


Recap Hololens Skills



<http://goo.gl/dXWVdz>

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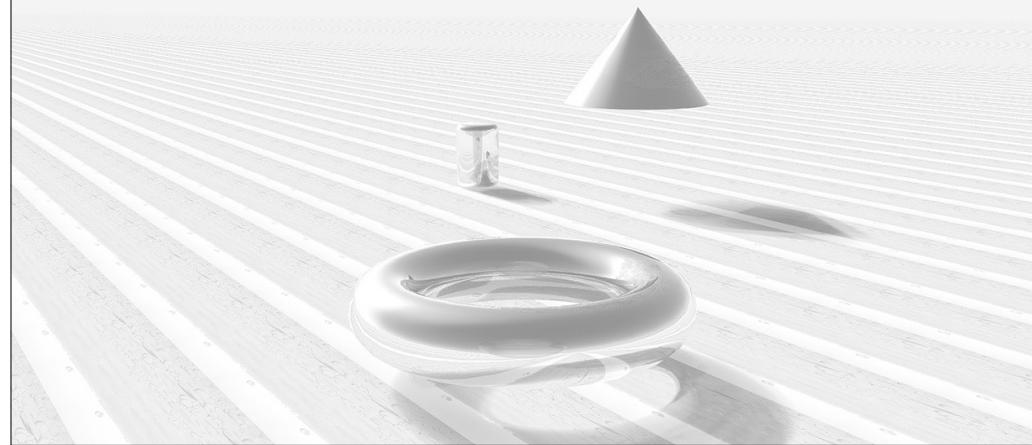


Continue design process with LASERs



Plan Your Projects

No Class Thursday!



Or Next Week!

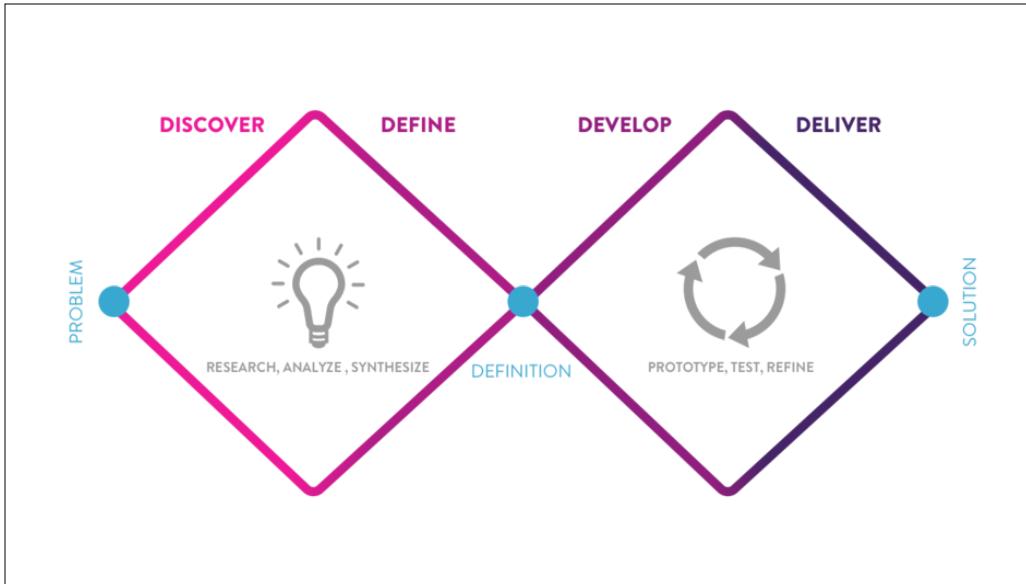
Due in two weeks (9/26):

Working Laser Game MVP

- Obstacles that player must avoid
- Consequence for Success
- Penalty for Failure

Design Outline with visuals

Technical Outline with Pseudocode

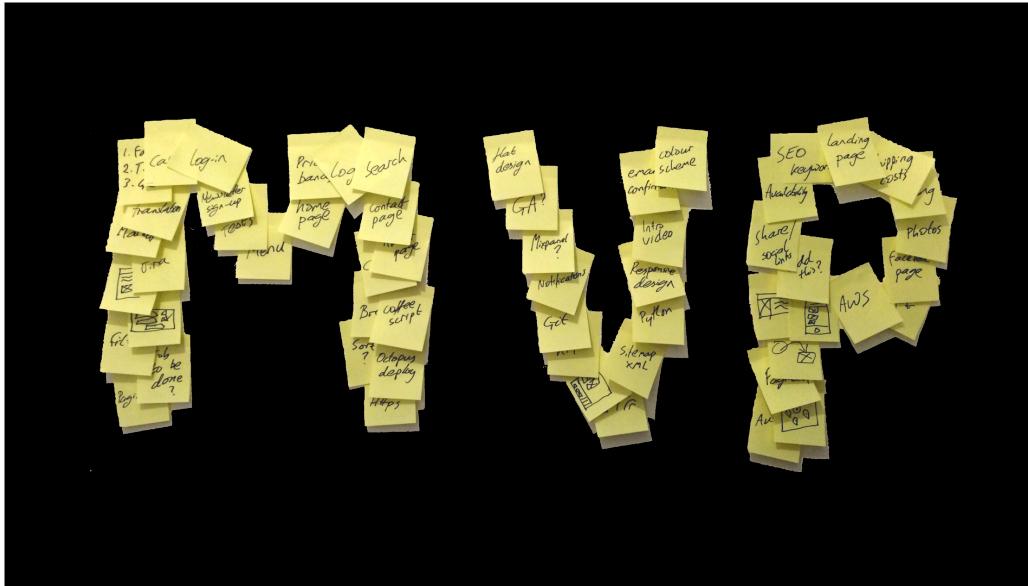


Double Diamond is the name of a design process model developed by the British Design Council in 2005

Alessi, BSkyB, BT, LEGO, Microsoft, Sony, Starbucks, Virgin Atlantic Airways, Whirlpool, Xerox, Yahoo!

Different designers manage the process of design in different ways. But when we studied the design process in eleven leading companies, we found striking similarities and shared approaches among the designers we talked to.

Very useful to structure development of ideas when otherwise so open ended



Minimum Viable Product

The Lean Startup - by Eric Ries

Maximum amount of validated learning about customers with least effort.

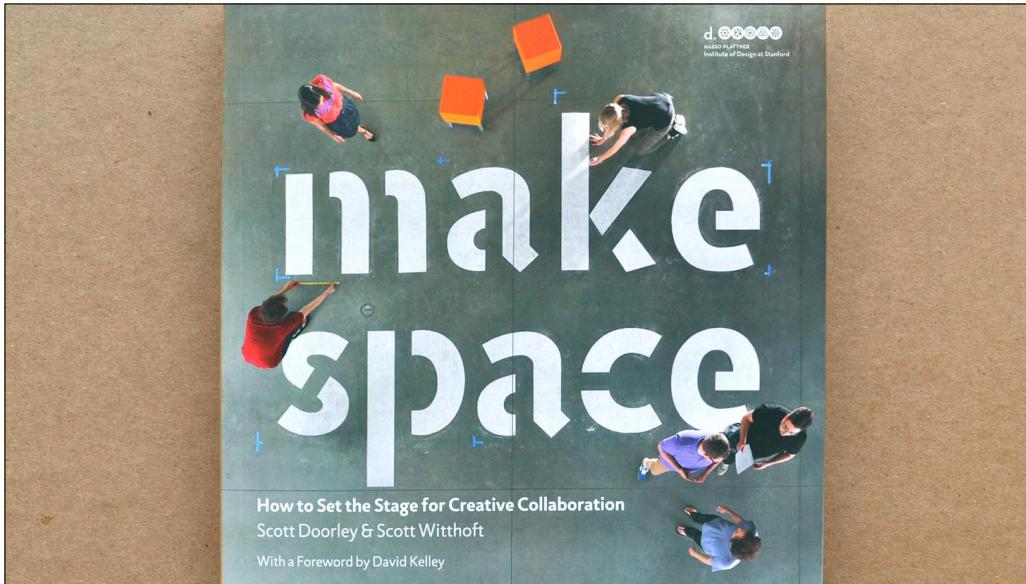
(Grown to mean a lot more than it was originally)

Riskiest Assumption Test - There is no need to build more than what's required to test your largest unknown.

No expectation of perfect code or design. No danger it will prematurely become a product.



Don't try to do too much. Focus on designing a focused user experience.



Recognize Your Emotional Arc during a Project.

This is a note just for you: creative projects have an emotional frequency. Being aware of this can help you successfully navigate the tricky peaks and troughs.

The arc of a space design process rivals that of any fictional drama. Hopes and dreams hang in the balance. Fear and excitement battle for the upper hand. Egos are invested, and status jockeying abounds. It can be largely frustrating or quite exciting, depending on how you choose to experience it.

As you progress, you will likely encounter the following phenomena. If you know how to recognize them, you can at least reconcile how you are doing with how the project is doing.

+ **A sense of excitement and limitless possibility.** An idea or discovery arrives shiny and new, without the eventual scuff marks inherent in the process of bringing it to fruition. The sense of potential is empowering, yet rarely realistic. It's like buying a Ferrari without yet having found a mechanic to service it. Enjoy this part as it happens, but not so much that you are afraid to let it go.

– **Overwhelming complexity.** As soon as you dig into a space, you'll

of emotional and logistical factors simultaneously at play. This is quicksand. Too much thinking here means trouble. When you are in this territory, focus on doing. Get right to prototyping through quick mock-ups and experiences. Acknowledge and categorize new issues as they arise, but prioritize—you'll never be able to resolve all of them. Keep your eyes open for inspiration and direction away from the soup of complexity.

+ **Unifying insights.** These are moments of clarity when you feel you've got it all figured out. They are the siren songs: glorious but potentially derailing. Strive with all your might to get to this point, but diligently question this clarity when you arrive.

– **Complete loss of confidence.** What was I thinking? I can't do this. You can, and in fact, you are doing it. This feeling is mostly useless, although it may signal that you should enlist some help to tackle a specific issue. If so, get the

ence, ignore it by taking new action.

– **The brutal realities of implementation.** Almost everything you do will take longer than you think because there is a lot more to consider than is apparent. You will have to make compromises. Have the strength to stand up for the right things and the wisdom to let go of the meaningless bits. The ability to know how and when to do this often comes from the proof & intuition you'll acquire through prototyping.

+ **Completion.** It's done! Enjoy the sense of accomplishment. You may also experience some postpartum malaise. Fine—that's natural, but don't wallow in it. Do take time to celebrate your accomplishment and reflect on your process. You're never really done anyway; you will likely repeat at least some part of this process someday. Reflection is important to make your next steps more efficient.

A plot of the self-described emotional well-being among Stanford graduate design students.

FALL WINTER SPRING FALL WINTER SPRING

SWINGER

Walls vs. Open Space

Pro: Walls support collaboration, yet collaborative teams thrive in openness.

Openness is an engine of innovation. Openness in the form of visibility and room to move breeds awareness and spawns intersections that keep people inspired and keep projects in tune.

Walls are terrific display surfaces. Walls and vertical surfaces are great for making ideas visible across a group. Visual evidence of work inspires and supports discovery and synthesis.

Dann, 11

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Overwhelming complexity

As soon as you dig into a [project], you'll uncover a seemingly endless pile of emotional and logistical factors simultaneously at play. This is quicksand. Too much thinking here means trouble. When you are in this territory, focus on doing. Get right to prototyping through quick mock-ups and experiences. Acknowledge and categorise new issues as they arise, but prioritise – you'll never be able to resolve all of them. Keep your eyes open for inspiration and direction away from the soup of complexity.

Unifying insights

These are moments of clarity when you feel you've got it all figured out. They are the siren songs: glorious but potentially derailing. Strive with all your might to get to this point, but diligently question this clarity when you arrive.

The brutal realities of implementation

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Thank you!