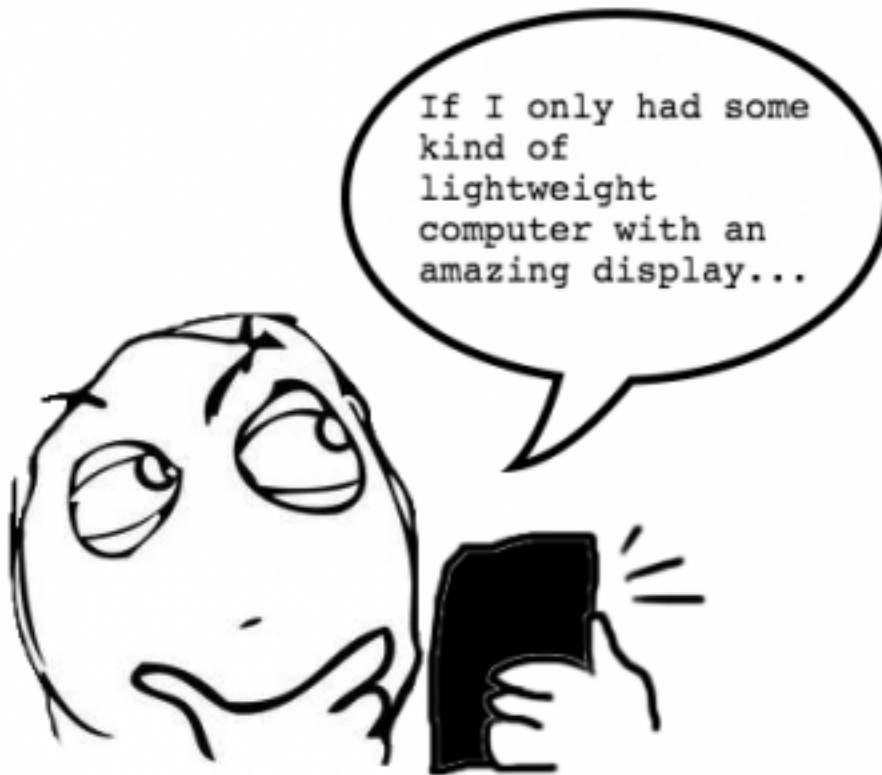


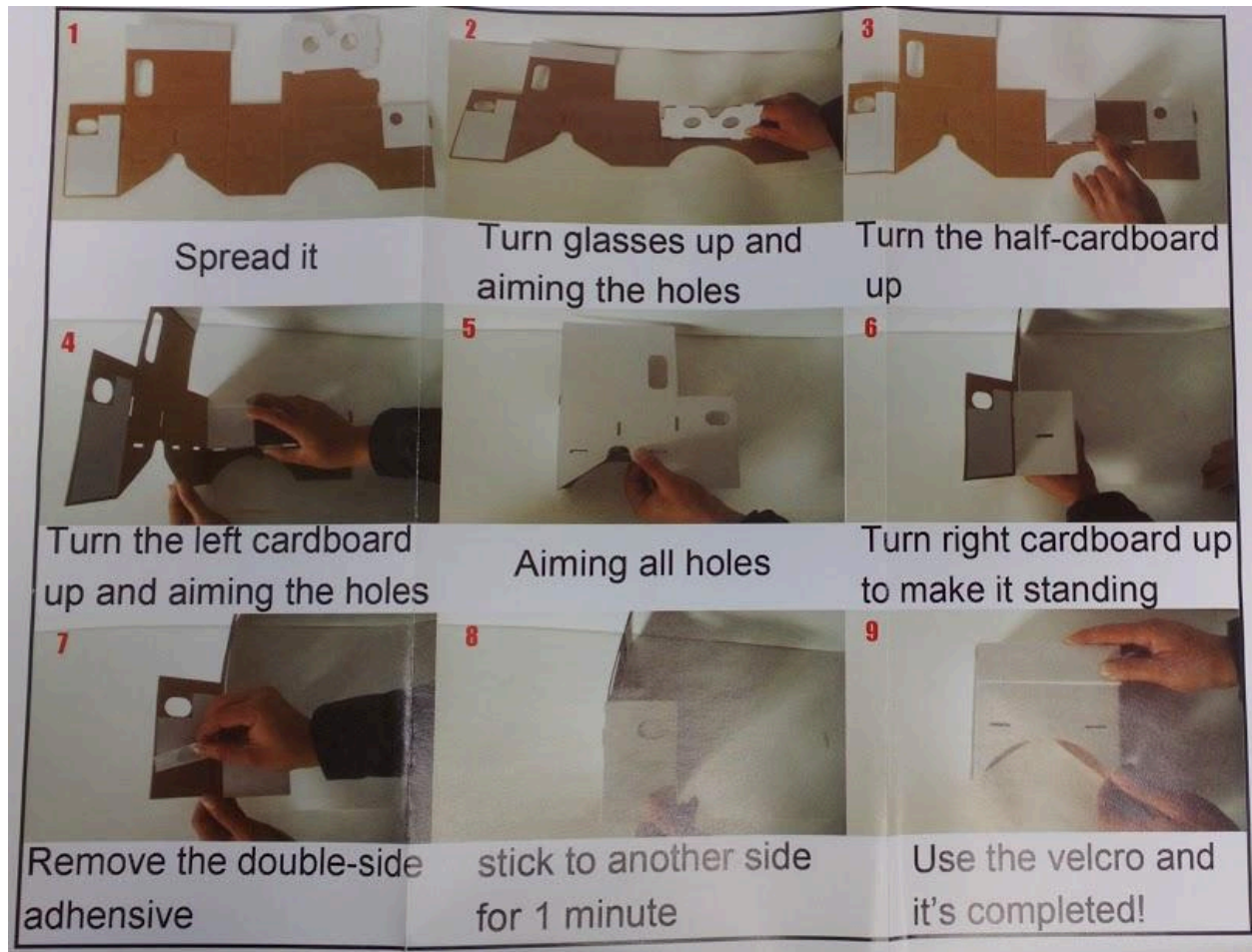
Introduction

Welcome to the wild world of Virtual Reality Experience and Design. This camp is designed to teach the fundamentals of designing three dimensional objects and using virtual reality (VR) to experience your designs in new immersive ways.



Preparing Your VR Gear

For this camp, we will primarily be using android phones with google cardboard kits. The first thing we will need to do is to put together our google cardboard. There are many different types of third party solutions for google cardboard so your instructions might be a little different than the ones below.



Cardboard Design Lab

The Cardboard Design Lab app is made by google to give examples of good design that we will be learning about in camp.

Start the app up and place the phone in your google cardboard. The class should go through each example together and have a group discussion about each one. Here are some sample discussion points for each example:

Foundation

Using a Reticle

- What is the purpose of a reticle?
- Why is the first design principle about something that helps you aim?
- How are reticles used in the real world?

UI Depth and Eye Strain

- Why is eye strain an important thing to consider when designing VR worlds?
- What other kind of “strain” can be designed away in other fields?

Using Constant Velocity

- When is it appropriate to mess with velocity?

Keep the User Grounded

- What effect did the floor effect have?
- How is this effect unique to VR?

Maintain Head Tracking

- Why is this example so disorienting to some people?

Immersion

Note: Do all of “Immersion” and then discuss as a class

Guiding with Light

- In example, literal pools of light are used. In what way can you, as a designer, be more subtle?

Leveraging Scale

- How is a sense of scale important in world build?

Spatial Audio

- Why is sound so important?
- Notice how low the polygon count is of the fire and rocks, how much does the sound change your visual perception of this scene?

Gaze Clues

- What Gaze Clues could you design?

Make it Beautiful

- What was the difference between the themes of the “Foundations” and “Immersion” profile (not just how are they visually different)? What did they teach?
- Why did they choose the order of these tutorials?

Photospheres

Open up the Google Camera App and select “photospheres.” Go outside and shoot some photospheres to look at using your google cardboard.

- Shoot at least one perfect photosphere
- Shoot a photosphere with the same person in it multiple times

3D Games

Give these different VR games a try and discuss which of the design elements discussed in class they do well or not well.

- Corridoom
- VR Crossy for Cardboard
- Deep Space VR
- VR Roller Coaster