


VR for Google Cardboard in Unity

Challenges and opportunities

Content

- 5 W's of VR (sort of...)
- Cardboard and Unity
- Must-know of VR
 - Cybersickness
 - UI
 - Single button controller
- Future of VR?
- Cute kitten picture 

5 W's of VR

What is VR?

Trick the user's senses into believing he is somewhere else.

"It's a trap!" **Admiral Gial Ackbar**



5 W's of VR

Where: which industries?

Mainly entertainment and education.

A whole new medium, very immersive.

5 W's of VR

Who can build VR experiences?

Everyone at a basic level.

Game designers and filmmakers. **BUT** many new factors to consider.

5 W's of VR

When VR?

~~25 years ago?~~

Now!

(with a *LOT* to come...)



5 W's of VR

When VR?

~~25 years ago?~~

Now!

(with a *LOT* to come...)

And a lot cooler ٩



5 W's of VR

Why VR?

Because it's **AWESOME!**

...and opens new doors (to **AWESOMENESS!**)

VR for Cardboard with Unity

Why Cardboard?

- Cheap => available for all
- Simple
- Good enough



Why Unity?

- Google made a Cardboard SDK for Unity
- It's **Fun** to use!
- It's powerful
- It's *free* (until you want to monetize your apps)



Before you start



Cybersickness 🤢
User interface 🤕
Single button controller 🥵



Before you start



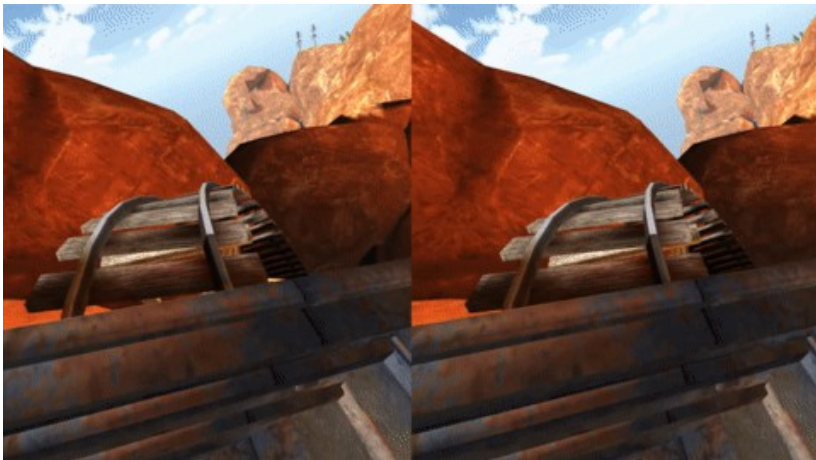
Cybersickness 🤢
User interface 🤕
Single button controller 😓



Before you start

Cybersickness

- Main danger for VR!
- Symptoms similar to motion sickness (seasick, airsick...)
- Caused by sensory conflicts
- Linked to the perception of self?



Cybersickness

Common causes, the “easy ones 🙈”:

- Low FPS
- Image latency
- Bad FOV



Cybersickness

Common causes, the “*tricky ones* 🤔”:

- Moving virtually but not physically
- Being moved virtually
- Will virtually moving being stop by something you don't see (invisible wall)
- Moving your head virtually (using the controller stick)
- Being physically touched by someone when you don't expect it
- Touching something physically (table, chair...) that you don't see in the virtual environment
- Someone physically talking to you but not visible in the virtual environment

🔪 => **Everything that breaks the illusion!** 🔪

Before you start

Cybersickness

- Start slowly 🐌, take your time, stop at the first sign
- You get use to VR with time