## VIRTUAL REALITY

## HOW TO DESIGN FOR

#### **BASIC RULES**

- Affordances
- Constraints
- Mappings
- Consistency and predictability
- Feedback
- Error tolerance and error avoidance
- Eight Golden Rules
- Interface animation
- Physics analogy
- Metaphors as a basis for UI design

### **PRESENCE & IMMERSION**

- "Immersion, in our view, is therefore an objective description of what any particular system does provide."
  - -> Technological capability.
- "Presence is a state of consciousness, the (psychological) sense of being in the virtual environment, and corresponding modes of behaviour."
   –> What the user perceives to be true

Slater, Mel, et al. "Immersion, presence, and performance in virtual environments: An experiment with tri-dimensional chess." *ACM virtual reality software and technology (VRST)*. New York, NY: ACM Press, 1996.

#### AFFORDANCE

I should have used the term "perceived affordance," for in design, we care much more about what the user perceives than what is actually true.

Donald Norman, <u>www.jnd.org</u>

VR Game Job Simulator:



https://www.youtube.com/watch?v=azD5t6X2urc

#### CONSTRAINTS

https://developer3.oculus.com/documentation/intro-vr/ latest/concepts/bp\_intro/

#### **GROUP EXERCISE**

Review the rest of the basic rules and review how you applied them in your prototype and what changes you need to make based on them (7 min)

#### **GROUP EXERCISE**

- "Your have recently found out that a competitor will be launching before your planned deadline. Therefore you need to adapt your strategy and launch 1 month earlier. This means you need to reduce the scope of your product for the launch.
- Analyze and present 2 user stories that will reduce the scope of the product.

#### YOUR ANALYSIS SHOULD ANSWER THE FOLLOWING QUESTIONS

- What is the name of the **user story** that can be excluded?
- What **priority** does the story have?
- What are the **requirements** that result from that story?
- What **personas** would be affected?
- How much **time** would the project **save**?
- Which of the stories would you **recommend** and why?

# PRESENTING NEXT

#### CONTENT

- Vision statement (1 min)
  Describe your idea in one sentence
- Mid-fi Prototype (3-5 min)
  Go through a clickable version of your prototype
- MVP & Next steps (2 min) Present your minimal viable product and your next steps to wards completing it