Small: Cybersickness Mitigation and Test Suite Development

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https://www.nsf.gov/awardsearch/showAward?AWD_ID=2139232&HistoricalAwards=false



Challenge:

Long use of virtual reality (VR) systems has trouble with cybersickness

Current estimates that there is a mere 15 minutes of safe usage
 Cross comparison of cybersickness research is difficult
 Low-interference mitigation options are needed

Scientific Impact:

New mitigation methods

Build safeguards into applications

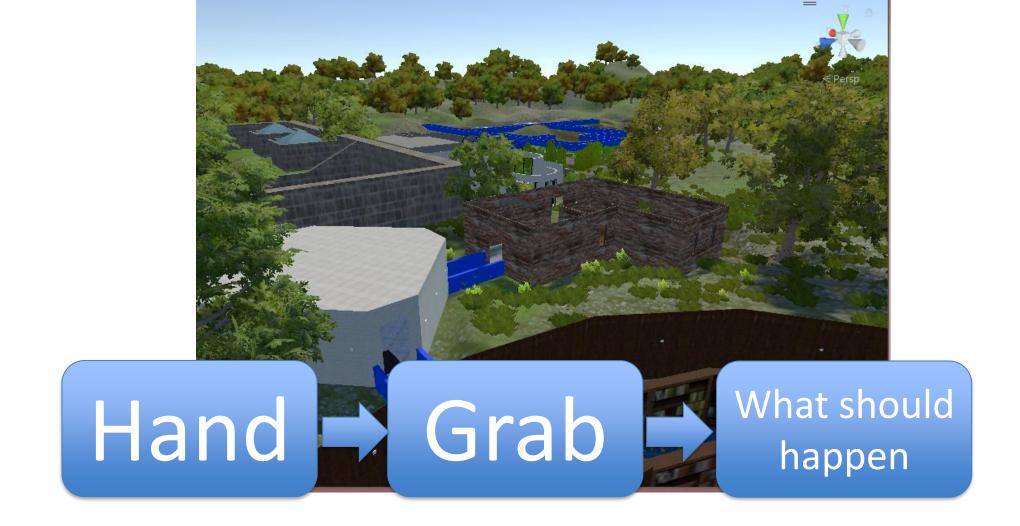
Improving length of VR use aid in all VR applications

The conditions also could affect usability

Solution:

Develop a test suite to allow for rapid testing targeting non-coders but allow coders to expand Test against low-interference mitigation options

Color, contrast, and realism



Society Impact:

Prediction methods are lacking

Increased length of use aids can make VR training viable
Improving length of VR use aid in all VR applications
Improved VR skill pool

Educational Impact:

First VR course offering in the state!

NEW VR textbook published VR classroom expanding use to other departments.

Broader Impact:

VR exists for safety, surgery, sensitive sites, and more
Build safeguards into applications
Goal is to reach classroom period of 50 minutes