

Graduate Project Fall 2021

Wind Turbine Interface

Weight: 10%

Description:

Create a User Interface in VR for a Wind Turbine

Persona:

Engineers who are being trained to operate the user interface of a wind turbine engine.

Scenario:

Engineers are being trained off-site in Virtual Reality. The intention is that once trained in Virtual Reality, they will be able to control the User Interface on site. The actual on-site interface can either consist of a physical interface or a virtual interface. Please choose accordingly. The requirements for the onsite UI are as follows:

A link to the actual article is provided on Avenue

2. Wind Turbine Environment

Most of the systems consist of people and machines, which performs a function to produce some form of output. Inputs are received in form of matter, energy and information. A wind Turbine System can be explained with the Figure 1.

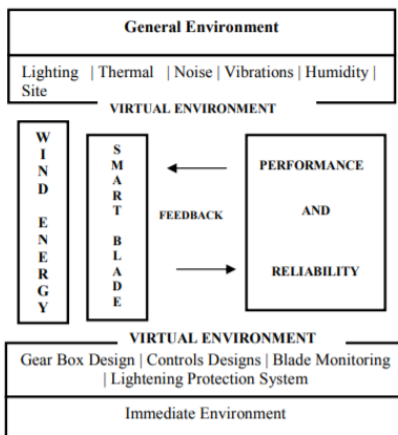


Fig 1 Wind Energy Environment adopted from Human Machine Model from prEN1436: 2002(E)

Requirements

Part 1:

Option 1: Paper Video Prototype

Create a paper prototype of the VR interface. Record a video of your paper prototype explaining any details that you feel are necessary

Option II: Visual Tools

Create a prototype using any visual design tools. Record a video of your prototype explaining any details that you feel are necessary

Part II: Report

Write a brief report explaining your design decisions. Make reference to Norman's Design Principles, along with any other relevant HCI principles that we have discussed in the course

Report Length:

Time New Roman, 12-point font, double spaced

Approx 3 -6 pages

Due Date:

Due dates will be posted on Avenue

Submission:

Via Avenue

Grading

Assignments will be assessed on the following criteria:

- Timely submission
- Answering all the sections in the report
- The overall quality and submission of your work
- Your explanation of HCI principles
- The actual paper prototype along with your explanation
- Grades may be deducted for assignments which are poorly written. Please check your spelling and grammar