SENG2260 Human Computer Interaction

Workshop 1

Week 1

SPS

Today

- Groups
  - The group project will be completed in groups of 7-8 students. You can pick your own groups. This is to be completed this week or groups will be allocated alphabetically
- Labs
  - These are with your project groups. They start **next week.** Check the lab requirements. Arrange to complete the labs in your group (or sub-groups).
- Assessment
- Project

Assessment

- Group work
  - Assignment 1: Low fidelity prototypes (week 7) 20%
  - Assignment 2: Final interface and report (week 13) 20%
  - Presentation: Final interface (week 12) 10%
  - Peer evaluation on each group item

- Individual work
  - Research Awareness activity 10%
    - Computing Research Awareness Assessments (on BB)
    - SONA (registering for participation studies)
    - Start week 3
  - Formal exam (2 hour closed book) 40%

Project - 2019

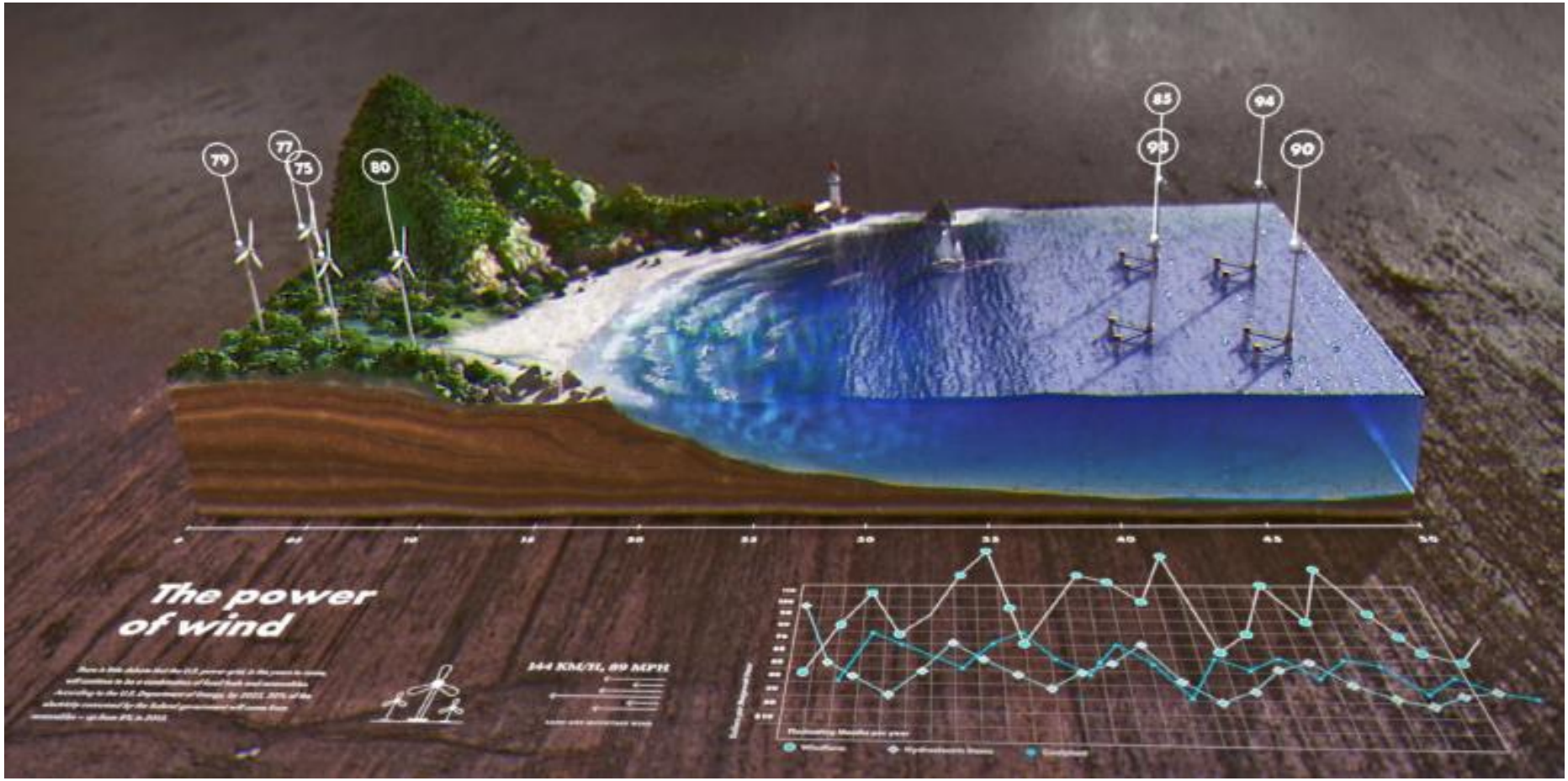
- The following is the design problem that each group will undertake:

- There is ongoing interest in virtual and augmented reality display technologies and the immersive interactive environments that they enable. Although head-mounted display technology is not new, 2019-2020 will see the release of new and second generation VR/AR systems for mainstream use, e.g. Facebook's Oculus Rift S/Quest, Microsoft's HoloLens 2, HTC/Valve's Vive Pro, and Sony's Playstation VR. In addition to the challenges of engaging with a general user base, it is unclear what the VR/AR "killer app" will be. Previous research has explored military, medical and educational use of similar technology. However, as these advanced user interfaces enter mainstream usage there are exciting opportunities to explore new applications of this technology and consider how this may impact human-computer interaction (HCI)/user experience (UX) approaches to designing, prototyping and evaluating user interfaces.

- The group project this year will consider the use of the Microsoft HoloLens 2 in:
  - the UON Gallery (Callaghan students) or
  - The Millery Café/Cafeteria (Central Coast students).

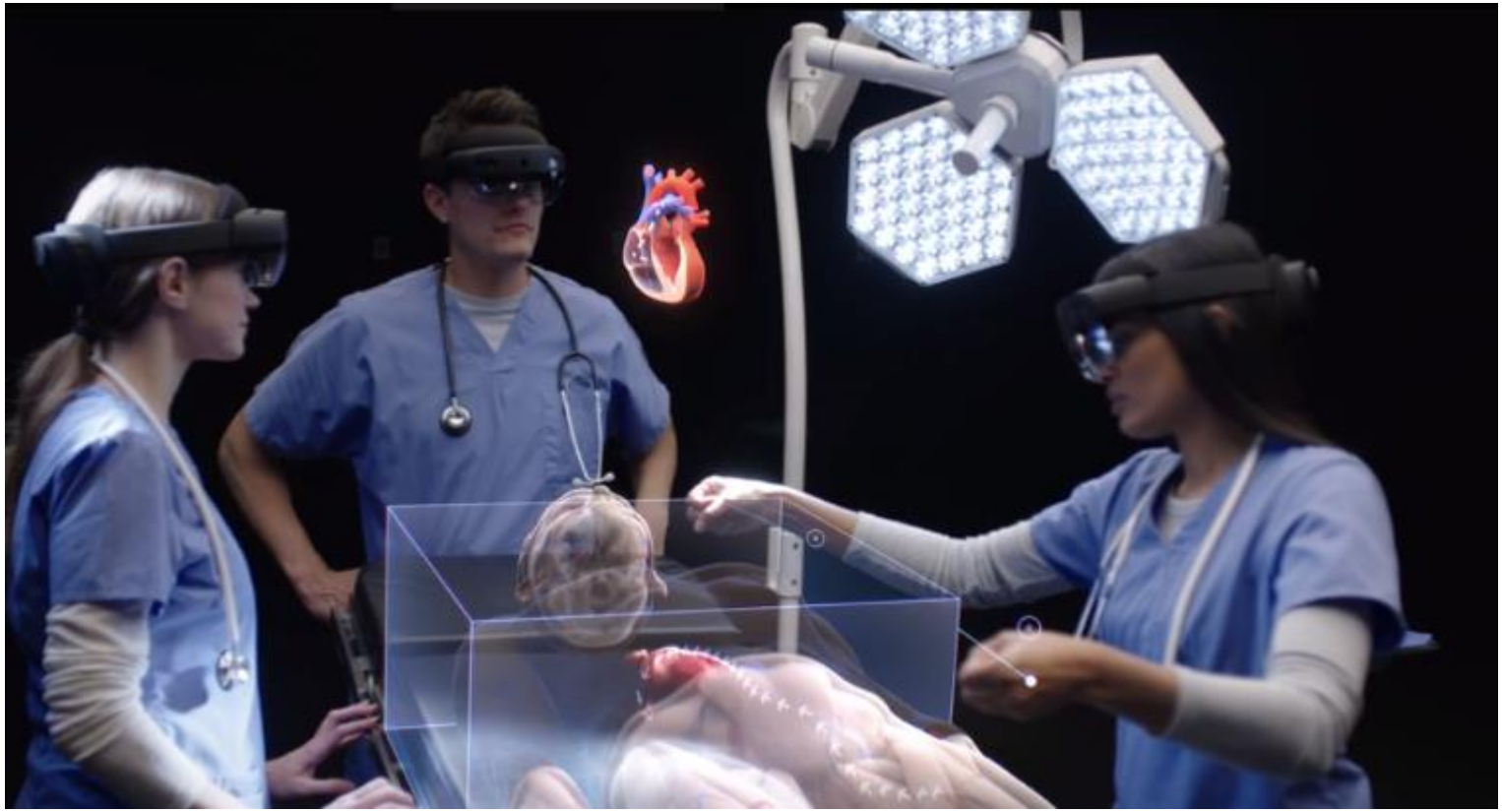
- Your group must design the user interface for a HoloLens 2-based interactive system.

- https://www.microsoft.com/microsoft-hololens


79
77
75
80
85
94
93
90
The power of wind
144 KM/H, 89 MPH

HoloLens 2 - video

- https://www.microsoft.com/en-us/hololens#



Project – 2019 – QUESTIONS?

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Workshop 2

- Distributed Cognition

- Read:
  - Shamus P. Smith, Jonathan Hart, "Evaluating Distributed Cognitive Resources for Wayfinding in a Desktop Virtual Environment", *3D User Interfaces (3DUI'06)* 2006, pp. 3-10, https://doi.org/10.1109/VR.2006.60