# School of Electrical Engineering and Computing SENG2260 – Human-Computer Interaction

## **Lab 9: High Fidelity Prototypes**

Week 10

## **Interface Prototyping**

In your group, continue with your final prototype for your project. Review the assessment specification and the marking form for the Final Report.

# **High Fidelity Prototypes**

Use the time in this lab to continue to move your interface design from your low fidelity prototype to your high fidelity prototype.

Consider what extra or improved dimensions will be represented in the high fidelity prototype, for example:

#### Appearance:

 size, colour, shape, margin, form, weight, texture, proportion, hardness, transparency, gradation, haptic, sound.

#### • Data

Data size, data type (i.e. number, string, media), data use, privacy type, hierarchy, organization.

#### Functionality

o System function, users' functionality need.

#### Interactivity

o Input behavior (voice, gesture etc), output behavior (visual, audio, haptic, olfactory), feedback behavior, information behavior.

### • Spatial structure

 Arrangement of interface or information elements, relations between interface or information elements – which can be 2D or 3D, intangible or tangible, relative or absolute, or mixed.

Hi-fidelity prototypes can be developed using tools such as "Just in Mind" from http://www.justinmind.com/ or via game engines such as Unity3D (https://unity3d.com/), Unreal Engine (https://www.unrealengine.com/what-is-unreal-engine-4) or via tools to build Quicktime VR panoramas.

Also consider use of the HoloLen emulator (<a href="https://docs.microsoft.com/en-us/windows/mixed-reality/using-the-hololens-emulator">https://docs.microsoft.com/en-us/windows/mixed-reality/using-the-hololens-emulator</a>). This works with the Unity engine to prototype holographic apps.



