

What I should already know:

- how to take digital photos.
- how to use sequence and repetition.
- how to record sounds using a variety of devices.
- how sounds can be uploaded to use on the computer/device.
- how to evaluate a piece of music.
- what a repeating rhythm is .
- about the work of architects, designers and engineers working in 3-D.
- how to evaluate the aesthetics of a space.
- which packages can be used to create virtual spaces.

By the end of this unit I should be able to:

- explore real-world and imagined locations in VR (if possible).
- create 360 photosphere images.
- upload an audio file to a web server or cloud storage.
- link physical objects to digital content using QR codes.
- create their own VR scene.
- program objects and interactions in VR .

Productivity

Experimenting with virtual and augmented reality

We are VR Designers



Key vocabulary

Accelerometer: hardware component providing data on changes in motion, typically in three directions

Augmented reality (AR): digital layer superimposed on a view of the real world

Global positioning system (GPS): this system allows a user to determine their exact location using a network of satellites

Google Cardboard: low-cost VR headset, typically made from cardboard and plastic lenses, which repurposes a smartphone as a VR display

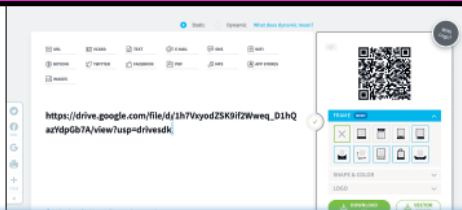
Photosphere: spherical collection of photographs so that the image displayed matches the direction viewed

QR Code: 2-D array of light and dark squares used to encode text in a way that can be read using a smartphone or tablet camera

Share Code: CoSpaces shortcut to allow those with the software to view a scene created by another user

Stereographic: a pair of slightly different images created with a slight offset, and shown to left and right eyes to create the illusion of depth

Virtual reality (VR): simulated, immersive 3-D representation of a real or imagined scene



By the end of this unit I will know:

- the difference between real and imagined locations.
- how to explore a familiar location in Street View.
- how to take photographs on location.
- how to explore a scene in CoSpaces.
- how to place objects in a CoSpaces scene.
- how to program an object to move in CoSpaces.
- how to upload an audio file to cloud storage.
- how to show respect for privacy by blurring some content.