

- **Assessment Task: Gaming Frameworks and VDC Experiences**
Individual Assignment marked out of 100. Due Midnight, Sunday 3rd December 2017

An individual exercise in three parts:

PART ONE (This component is worth 30 marks in total)

Broad user performance data for one state of the art serious video gaming system will be provided in the form of a simple spreadsheet comparing conventional and video game based training learning outcomes. You are to analyse the data and write a summary of your findings, justified by the data. Analyse the data statistically (using simple statistical measures) and visually (using simple graphs). Use the following questions to structure your summary:

- Which, if any, of the two approaches most improves learning?
- In what respects is the learning improved – overall uplift, pass/fails, across the board of hazard types, etc.?
- What are the apparent strengths and weaknesses of the video game approach?

PART TWO (This component is worth 30 marks in total)

To write a functional description of TWO state of the art serious video gaming systems in use at the Safety Training Centre of a major local contractor. These descriptions are to be based on a user perspective of each system. Based on your experience of the games, describe the key features and functionality relevant to the use of the games as training resources.

Access to the two video game training systems will be provided by download and/or for access through Hong Kong University. Two reviews by each student.

PART THREE (This component is worth 40 marks in total)

Identify an existing/commercial virtual reality video game that offers innovative functionality and present a functional description as above. The game/function selection is specifically to address and improve an aspect of integrated teamwork in the broader virtual design and construction context, with disruptive potential for the AEC industry.

Based on the functionality identified, design a game scenario to demonstrate the key functionality of the application you are proposing to address and improve integrated project delivery. This scenario should address the physical setting for the situation model, key scenarios within that situation model, and the potential performance analytics you propose to demonstrate the performance outcomes. Demonstrate your proposed game scenario using images/video from the original source and supplement with conceptual diagrams and sketch visualisations using the VR storyboard templates supplied via the course blog.

Submission of work:

A final report for all parts of the assessment task is to be submitted as a SINGLE pdf format file, upload to Moodle by MIDNIGHT on Sunday 3rd December 2017.

Further details and learning material will be posted to:

www.reco7611-2017.blogspot.com