UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Game Design, Programming and Development
Module Code	GAV5002-B
Academic Year	2024/5
Credits	20
School	School of Built Environment, Architecture & Creative Industries
FHEQ Level	FHEQ Level 5

Contact Hours	
Type	Hours
Lectures	24
Online Tutorials (Synchronous)	12
Laboratories	12
Directed Study	152

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1

Module Aims

To introduce the technology of computer game construction and programming. To help you develop your game programming skills through the implementation of your own game ideas. To instil a balanced and holistic approach to produce design specific to your chosen project. To develop further design methods and techniques and a rigorous application of the design process and facilitate autonomous learning in your chosen subject area.

Outline Syllabus

This module covers:
1. The design process - scoping the brief; arts work; project management; self-motivation; project evaluation; time management; design strategies; technical challenges.
2. Introduction of windows-based computer games structure and programming, such as C#; basic concepts and principles of games programming; introduction to an industry-standard interface programming technology, such as Unity3D; game algorithms, image manipulation in the games environment, interaction, artificial intelligence, game physics.

Learning Outcomes	
Outcome Number	Description
01	Analyse the basic concepts and principles behind computer games development in a programming context; have a clear overview of the process of design and development of computer games.
02	Realise your own game ideas through the development of a computer program.
03	Work effectively in a team environment

Learning, Teaching and Assessment Strategy
Knowledge is imparted via lectures, applied through seminars and tutorials and project design, programming and development work. Assessment is via an individual game project to allow students to demonstrate practical skills. Knowledge and understanding are assessed via the written components (report). The assessments will be individual based coursework assignments; the supplementary assessment will also take the form of individual assignments.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Coursework - Artefact	Coursework. Game Project.	60%
Summative	Coursework - Artefact	Lab Work Tasks	40%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.
