

Module Title:	Media Systems
Credits:	10
NFQ Level:	7
Module Delivered In	No Programmes
Teaching & Learning Strategies:	Lab tutorials and demonstrations of database and programming concepts. Problem briefs are then solved by students.
Module Aim:	Develop the ability to end-to-end data-driven web solutions
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Appreciate relational database theory by being able to (a) Create table and relationship designs in relational databases according to best practices (b) Identify suitable queries to allow efficient storing and retrieval of information from databases (c) Appraise suitable DBMS currently available
LO2	Apply the fundamentals of programming using a server side scripting language to develop solutions for client requirements.
LO3	Produce input driven front-end user interfaces as as part of multitier architecture
LO4	Produce a suite of server side scripting modules to write and retrieve data from the database as part of an multitier architecture
LO5	Design and develop a relational database as part of an multitier web architecture
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

Relational Databases

An appreciation of relational database theory by being able to (a) Create table and relationship designs in relational databases according to best practices (b) Identify suitable queries to allow efficient storing and retrieval of information from databases (c) Appraise suitable DBMS currently available Produce a relational database by using: (a) An industry standard DBMS (b) A server connected to the network where the database can be deployed by the student

Server Side Programming

An understanding of the client server nature of data driven systems by (a) Outlining the request/response model (b) Identifying suitable server side scripting languages and their benefits (c) Appreciating the responsibilities of each tier in the N-Tier architecture 1. 2. Produce a suite of server side scripting modules to write and retrieve data from the database by using (a) An industry standard scripting language (b) A suitable Integrated Development Environment (IDE) (c) A deployment tool to load modules to a specified server to communicate with the database 3. Produce web forms by using (a) XHTML (b) CSS (c) A web authoring suite

Assessment Breakdown

%

Continuous Assessment

100.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Continuous Assessment 1: Learning Outcomes Assessed • To develop a knowledge of relational database theory • To develop a knowledge of Database Management Systems (DBMS) • To develop a knowledge of the different stages in project development • To gain skills in database development using a specific DBMS Sample: Required: A relational database that accepts, stores and delivers data for a real estate agent's office. This database must be designed using formal database development techni	1,2,3,4,5	25.00	n/a
Other	Continuous Assessment 2: Learning Outcomes Assessed • To gain competence in working in project development teams • To gain competence in presenting finished projects to clients • To gain competence in successfully managing a systems development project • To gain skills in server side scripting and deployment of modules to server • to gain skills in creating web forms using industry standards Sample: Required: A payroll processing website for remote contractors that allows users to i	1,2,3,4,5	25.00	n/a
Practical/Skills Evaluation	A substantial project is given for their final assessment submission. This will be data driven website that performs a number of different tasks for users The project must be deployed to a designated server, so as to be accessed in the college network. Learning Outcomes Assessed • To develop a knowledge of relational database theory • To develop a knowledge of Database Management Systems (DBMS) • To develop a knowledge of N-Tier architecture and the request/response model • To develop	1,2,3,4,5	50.00	n/a

No Project

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Every Week	3.00
Total Hours		3.00

