DEVL H3701: Web Development

Module Title:	Web Development
Credits:	10
NFQ Level:	7
Module Delivered In	2 programme(s)
Teaching & Learning Strategies:	Lab tutorials and demonstrations of database and programming concepts. Problem briefs are then solved by students.
Module Aim:	Create customer-centred dynamic web applications using standard web technologies. These web applications can be used in mobile and desktop browsers and mobile apps.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Produce user-centred web applications as as part of multi-tier architecture
LO2	Apply the fundamentals of programming using a server side scripting language to develop solutions for client requirements
LO3	Design and develop a relational database as part of an multitier web architecture
LO4	Produce a suite of server side scripting modules to create, read, update and delete data from the database as part of an multi-tier architecture

Pre-requisite learning		
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*		
9785	DSGN H2701	Web Design Methods
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*		
No incompatible modules listed		
Co-requisite Modules		
No Co-requisite modules listed		
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*		
No requirements listed		

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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 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	50.00	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	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

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Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Laboratory	12 Weeks per Stage	6.00
Independent Learning	15 Weeks per Stage	6.00
	Total Hours	162.00

Workload: Part Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Laboratory	12 Weeks per Stage	3.00
Independent Learning	15 Weeks per Stage	4.00
	Total Hours	96.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_HWVCD_B	Bachelor of Art (Honours) in Visual Communications and Design	5	Mandatory
CW_HWVCD_D	Bachelor of Arts in Visual Communications and Design	5	Mandatory