GMIT
INSTITIÚID TEICNEOLAÍOCHTA NA GAILLIMHE-MAIGH EO
GALWAY-MAYO INSTITUTE OF TECHNOLOGY

INFO08008
Web Application Development

Full Title	Web Application Development		
Status	Uploaded to Banner	**Start Term**	2017
NFQ Level	08	**ECTS Credits**	05
Module Code	INFO08008	**Duration**	Semester - (13 Weeks)
Grading Mode		**Department**	Comp Science & Applied Physics
Module Author	Ian McLoughlin		

Module Description

This module introduces the student to modern web application and network application development using frameworks in high-level programming and scripting languages. The focus is on building light-weight network services, particularly web-based services, and integrating those services with modern front-end frameworks.

Learning Outcomes

On completion of this module the learner will/should be able to:

1. Describe the common architectures of web applications.
2. Create scalable web services using modern architectural patterns.
3. Create a web application using a server-side framework.
4. Manage the development of a web application.

Indicative Syllabus

Web technologies

- Hypertext Markup Language (HTML)
- JavaScript
- Cascading Style Sheets (CSS)
- Hypertext Transfer Protocol (HTTP)

Web applications frameworks

- Routing
- Static resources
- Templates
- Error messages
- User inputs

Data handling

- Asynchronous JavaScript and XML (AJAX)
- JavaScript Object Notation (JSON)

Teaching and Learning Strategy

This module will be taught through a combination of instructor-led lectures and student-led practical sessions.

Assessment Strategy

This module will be assessed through a combination of project work and problem sets.

Repeat Assessment Strategies
Repeat assessments will be project based.

Indicative Coursework and Continuous Assessment:		100 %		
Form	***Title***	***Percent***	***Week (Indicative)***	***Learning Outcomes***
Assignment	Problem sets	40 %	Week 8	1,2,4
Project	Project	60 %	Week 13	1,2,3

Full Time Delivery Mode Average Weekly Workload:			4.00 Hours		
Type	***Description***	***Location***	***Hours***	***Frequency***	***Weekly Avg***
Lecture	Lecture	Lecture Theatre	2	Weekly	2.00
Practical	Practical	Computer Laboratory	2	Weekly	2.00

Online Learning Delivery Mode Average Weekly Workload:			4.00 Hours		
Type	***Description***	***Location***	***Hours***	***Frequency***	***Weekly Avg***
Practical	Online (Asynchronous)	Not Specified	3	Weekly	3.00
Online Learning	Online (Synchronous)	Not Specified	1	Weekly	1.00

Recommended Reading Book List
Mardan, A., (2014). *Practical Node.js: Building Real-World Scalable Web Apps*. Apress. ISBN 1430265957 ISBN-13 9781430265955

Online Resources
http://nodejs.org
http://getbootstrap.com
http://angularjs.org

Programme Membership
GA_KDATG_L08 201700 Higher Diploma in Science in Data Analytics GA_KSOFG_L08 201700 Higher Diploma in Science in Software Development