53751: Rich Web Applications 1

Module Details

Full Title:	Rich Web Applications 1
Language of Instruction:	English

Module Code:	53751	**Duration:**	1 Semester

Credits:	5
NFQ Level:	8
Field of Study:	Computer Science
Valid From:	Semester 1 - 2014/15 (September 2014)
Module Delivered in	1 programme(s)
Module Coordinator:	Derek O Reilly
Module Author:	Peter Gosling
Module Description:	Students completing this module will be aware of the design, implemention and deployment requirements of a fully maintainable, professional looking, content heavy feature rich dynamic cloud based application capable of being viewed over a wide range of devices.

Learning Outcomes:

On successful completion of this module the learner should be able to

1. Critically evaluate the issues that need to be addressed when designing and developing a content heavy web application
2. Apply appropriate technology to support rich feature client side appearance
3. Design, implement and test a content heavy database-driven cloud based web site.

Pre-requisite learning

Module Recommendations

This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).

No recommendations listed

Incompatible Modules

These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.

No incompatible modules listed

Co-requisite Modules

No Co-requisite modules listed

Module Content & Assessment

Indicative Content	%
HTML / CSS3 / Client / Server / Asynchronous data transfer. Introduce complex coding / styling, utilise combinations of client and server side technology to accomplish specific tasks. Live updates from client and server / graph / chart generation / canvas animations with database content,	0.00%
Rich Features Integrate streaming video / RSS. Provide capability to change content based on an event - e.g. Summer Sales specials based on date in database or user location.	0.00%
Back-Office Administration An advance range of back-office activities will include the standard content maintenance / file upload capabilities, multiple user profiles, work-flow development and integration, pdf report generation among others.	0.00%
Storyboarding / Narrative Utilise storyboarding and site narrative techniques to develop user needs and introduce awareness of data presentation.	0.00%

Assessment Breakdown	%
Course Work	100.00%

Full Time

Course Work

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Marks Out Of*	*Pass Marks*	*Assessment Date*	*Duration*
Continuous Assessment	Graph Assessment - dynamically plot database data as a graph / chart in a web page	2,3	30.00	0	0	Week 5	0
Written Report	Storyboard of a planned rich web application, including markups of pages, process flows, work flows etc. Identify the target audience and target devices and develop a plan to accommodate both.	1,2	20.00	0	0	Week 10	0
Other	Contribution to lab activities and year long SEO project / web traffic analysis CA	2,3	10.00	0	0	Week 12	0
Project	Implement inital prototype of planned rich web application based on initial design.	3	40.00	0	0	Week 13	0

No End of Module Formal Examination

Reassessment Requirement

No repeat examination
Reassessment of this module will be offered solely on the basis of coursework and a repeat examination will not be offered.

Reassessment Description
Repeat CA will consist of an overall project for the module which will combine all learning outcomes. Final project with a companion document detailing the storyboard narrative of the site, the code walk through, details of the admin capability / special features and database design plus testing plan and results.

DKIT reserves the right to alter the nature and timings of assessment

Module Workload & Resources

Workload: Full Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Practical	Lab based practicals	4.00	Every Week	4.00
Independent Study	Research appropriate material	4.00	Every Week	4.00
			Total Weekly Learner Workload	8.00
			Total Weekly Contact Hours	4.00

This course has no Part Time workload.

Resources

Recommended Book Resources

Matthew David 2013, *HTML5: Designing Rich Internet Applications (Visualizing the Web)*, 1 Ed., Focal PRess [ISBN: 9780240820766]

Thoriq Firdaus 2013, *Responsive Web Design by Example*, 1 Ed. [ISBN: 9781849695428]

This module does not have any article/paper resources

This module does not have any other resources

Module Delivered in

Programme Code	*Programme Title*
DK_KCOMP_8	Bachelor of Science (Honours) in Computing (Approved)