Module Details

Module Code:	PROG C7007
Full Title:	Web Patterns APPROVED
Valid From::	Semester 1 - 2019/20 (June 2019)
Language of Instruction:	English
Duration:	1 Semester
Credits::	5
Module Owner::	Michelle Graham
Departments:	Unknown
Module Description:	Student will use, analyse and evaluate the patterns and related technologies involved in building a 3-tier web application.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	**Module Learning Outcome Description**
MLO1	Write, test, and deploy technologies for database connectivity in a web application.
MLO2	Apply patterns to integrate small 3-tier web applications.
MLO3	Work as part of a development team.

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

Module Indicative Content	
Multi-tier applications Database connectivity, the DAO class, connection pooling.	
Web technologies Servlets, JavaServer Pages, Beans, expression language and tag libraries.	
Patterns for web development Singleton, Front Controller, Factory, Command, Model View Controller, other patterns.	
Internationalisation (I18N) I18N, localisation (L10N).	

Module Assessment

Assessment Breakdown	%
Course Work	100.00%

Module Special Regulation

Assessments

Full Time On Campus

Course Work			
Assessment Type	Continuous Assessment	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Week 6	**Learning Outcome**	1,2
Duration in minutes	0		
Assessment Description Project developing and testing DAO layer of a console-based application.			
Assessment Type	Open-book Examination	**% of Total Mark**	40
Marks Out Of	100	**Pass Mark**	40
Timing	Week 8	**Learning Outcome**	1,2
Duration in minutes	120		
Assessment Description Open book practical test.			
Assessment Type	Continuous Assessment	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Sem 1 End	**Learning Outcome**	1,2,3
Duration in minutes	0		
Assessment Description Student will be part of a group project to develop, test and integrate components across the various tiers in a 3-tier application.			

No Project

No Practical

No Final Examination

Part Time On Campus

Course Work			
Assessment Type	Continuous Assessment	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Week 6	**Learning Outcome**	1,2
Duration in minutes	0		
Assessment Description Project developing and testing DAO layer of a console-based application.			
Assessment Type	Open-book Examination	**% of Total Mark**	40
Marks Out Of	100	**Pass Mark**	40
Timing	Week 8	**Learning Outcome**	1,2
Duration in minutes	120		
Assessment Description Open book practical test.			
Assessment Type	Continuous Assessment	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Sem 1 End	**Learning Outcome**	1,2,3
Duration in minutes	0		
Assessment Description Student must coordinate with other members of a team to develop, test and integrate components in a 3-tier application.			

No Project

No Practical

No Final 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.*

Module Workload

Workload: Full Time On Campus

Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Practical	Contact	Lab-lectures where lecturer demonstrates theory and techniques and student implements them under supervision.	Every Week	4.00	4
Independent Study	Non Contact	Student should study and review what has been covered in labs.	Every Week	3.00	3
Directed Reading	Non Contact	Student is directed to book references and websites to enhance learning and techniques already started in lab.	Every Week	1.00	1
				Total Weekly Learner Workload	8.00
				Total Weekly Contact Hours	4.00

Workload: Part Time On Campus

Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Practical	Contact	Lab-lectures where lecturer demonstrates theory and techniques and student implements them under supervision.	Every Week	4.00	4
Directed Reading	Non Contact	Student must review and study what has been covered in lab work..	Every Week	3.00	3
Independent Study	Non Contact	Student should consult book and website references to enhance learning already started in lab work.	Every Week	1.00	1
				Total Weekly Learner Workload	8.00
				Total Weekly Contact Hours	4.00

Module Resources

Supplementary Book Resources

Eric Freeman, Elisabeth Robson, Bert Bates & Kathy Sierra. (2014), Head First Design Patterns, 2nd. O'Reilly Media, [ISBN: 0-596-00712-4].

Martin Fowler. (2019), Refactoring: Improving the Design of Existing Code, 2. Addison-Wesley, [ISBN: 978-013475759].

This module does not have any article/paper resources

This module does not have any other resources