H8SSWT: Server Side Web Technologies

Module Code:	H8SSWT
Long Title	Server Side Web Technologies APPROVED
Title	Server Side Web Technologies
Module Level:	LEVEL 8
EQF Level:	6
EHEA Level:	First Cycle
Credits:	10
Module Coordinator:	
Module Author:	Frank McArdle
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	**Learning Outcome Description**
LO1	Discuss web application architecture principles with reference to design patterns and class architecture guidelines
LO2	Identify object associations, aggregations and dependencies for a given problem domain
LO3	Interpret objects within a scripting language library to ascertain their function(s) and integrate such objects within new applications
LO4	Compare and contrast different approaches to server side development
LO5	Create a server side web application using scripting languages that incorporates web frameworks

Dependencies
Module Recommendations
No recommendations listed
Co-requisite Modules
No Co-requisite modules listed
Entry requirements

H8SSWT: Server Side Web Technologies

Module Content & Assessment

Indicative Content

Scripting Language
• Understand the basics of server side scripting and object-oriented building blocks. • Work with server side scripting libraries, gems, documentation, files and databases. • Implement and deploy server side scritping applications. • Explore server side scripting web frameworks and aspects of network programming. • Develop desktop and GUI applications with a server side scripting language.

Web application architecture
• Evaluating and selecting a framework • Separation of concerns • Layering • Code reuse • Legacy code • SOLID principles • Design patterns • REST

Web framework
• Introduction • Model-View-Controller • Rendering a view • Using a layout • Creating the Database • Creating the Abstract Model • Creating the controller • Case study • Standard libraries • Logging in and logging out • Security • Authentication • Payment

Web application development
• Test Driven Development • Version Control • Deployment

Assessment Breakdown	%
Coursework	70.00%
End of Module Assessment	30.00%

Assessments

Full Time

No Coursework

End of Module Assessment

Assessment Type:	Terminal Exam	**% of total:**	30
Assessment Date:	End-of-Semester	**Outcome addressed:**	1,2,5
Non-Marked:	No		

Assessment Description:
End-of-Semester Final Examination

No Workplace Assessment

H8SSWT: Server Side Web Technologies

Module Workload				
Module Target Workload Hours 0 Hours				
Workload: Full Time				
Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecture	No Description	24	Every Week	24.00
Tutorial	No Description	24	Every Week	24.00
Independent Learning Time	No Description	202	Once per semester	16.83
			Total Weekly Contact Hours	48.00
Workload: Part Time				
Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecture	No Description	24	Every Week	24.00
Tutorial	No Description	24	Every Week	24.00
Independent Learning Time	No Description	202	Once per semester	16.83
			Total Weekly Contact Hours	48.00

Module Resources

Recommended Book Resources

Sam Ruby, Dave Thomas, David Heinemeier Hansson. (2013), Agile Web Development with Rails, 4th Edition. Pragmatic Bookshelf, p.500, [ISBN: 1934356549].

Obie Fernandez, Kevin Faustino.. (2014), The Rails 4 way, Harlow; Addison Wesley, [ISBN: 0321944275].

Huw Collingbourne. (2011), The Book of Ruby, No Starch Press, [ISBN: 1593274009].

Supplementary Book Resources

Adam Gamble, Cloves Carneiro Jr, Rida Al Barazi. (2013), Beginning Rails 4, Apress.

This module does not have any article/paper resources

This module does not have any other resources

Discussion Note: