BSc (Hons) Web Design & Development

APPENDIX I

February 2023

University of Central Lancashire
UCLan Cyprus

LIST OF APPENDICES

1. Peer Assessment form
2. TABLE 2 - programme structure
3. TE1XXX (Interaction Design) Module Descriptor
4. TE2XXX (Social Media Management) Module Descriptor
5. TE3XXX (Data Management and Analysis) Module Descriptor
6. TE1888 Module Descriptor
7. TE2888 Module Descriptor

University of Central Lancashire, Cyprus

TE1800 – Web Design & UX

Self/peer evaluation mark sheet for group work

Your name:

You need to complete an evaluation for each member of your group – i.e. for yourself and the other members of the group. Award marks in each category on a scale of 0 to 10 – use the mark descriptors below to help you decide what mark would be fair.

Grade	Description
10	Did far more than could reasonably have been expected.
9	Made a major and sustained contribution throughout the project
8	Made a significant contribution to the group's work at several points.
7	Participated fully and made useful contributions throughout.
6	Participated well and made some useful contributions.
5	Generally participated, but without playing a significant role in the group.
4	The bare minimum, just enough to have participated in the group.
3	There was some participation, but it was too little or too disruptive to receive any credit for the group's work.
2	Participation was very poor both in quality and extent.
1	Participation was almost non-existent and was purely negative and undermining.
0	Did nothing.

Your tasks for this assignment:
(Please list your tasks and responsibilities here)

Group member's name:	
Category	**Mark**
01. Overall contribution to the task (generate ideas, concepts etc)	
02. Creativity (aesthetic and functional judgments) and problem solving (appropriate techniques and methods)	
03. Critical evaluation of independent contribution	
04. Organisation, reliability and professional competence	
05. Communication and cross-disciplinary understanding and flexibility	

Group member's name:	
Category	**Mark**
01. Overall contribution to the task (generate ideas, concepts etc)	
02. Creativity (aesthetic and functional judgments) and problem solving (appropriate techniques and methods)	
03. Critical evaluation of independent contribution	
04. Organisation, reliability and professional competence	
05. Communication and cross-disciplinary understanding and flexibility	

Group member's name:	
Category	**Mark**
01. Overall contribution to the task (generate ideas, concepts etc)	
02. Creativity (aesthetic and functional judgments) and problem solving (appropriate techniques and methods)	
03. Critical evaluation of independent contribution	
04. Organisation, reliability and professional competence	
05. Communication and cross-disciplinary understanding and flexibility	

Group member's name:	
Category	**Mark**
01. Overall contribution to the task (generate ideas, concepts etc)	
02. Creativity (aesthetic and functional judgments) and problem solving (appropriate techniques and methods)	
03. Critical evaluation of independent contribution	
04. Organisation, reliability and professional competence	
05. Communication and cross-disciplinary understanding and flexibility	

TABLE 2: COURSE DISTRIBUTION PER SEMESTER - BSc (Hons) Web Design & Development

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
Year 1								
A' Semester								
1.	Optional	English for Academic Purposes	EF1707	4	1h	13	52	5*
2.	Compulsory	Advertising and Marketing Communications	MK1006	4	1h	13	52	10
3.	Compulsory	Academic Writing	EF1498	2	1h	13	26	5*
4.	Compulsory	Introduction to Math and Statistics	MA1601	4	1h	13	52	5*
5.	Compulsory	Internet Fundamentals	TE1900	2	1h	13	26	5*
6.	Compulsory	Introduction to Audio-visual Technologies	TE1903	3	1h	13	39	5*
B' Semester								
1.	Optional	English for Academic Purposes	EF1707	4	1h	13	52	5*
2.	Optional	Managing People and Enterprise Skills	BU1025	4	1h	13	52	10
3.	Compulsory	Academic Writing	EF1498	2	1h	13	26	5*
4.	Compulsory	Introduction to Math and Statistics	MA1601	4	1h	13	52	5*
5.	Compulsory	Internet Fundamentals	TE1900	2	1h	13	26	5*
6.	Compulsory	Introduction to Audio-visual Technologies	TE1903	3	1h	13	39	5*
7.	Optional	University Elective	-	-	-1h	13-		10

*The ECTS indicates the equivalent student workload per semester.

The students will receive the 10 ECTS of the module further to successful completion of the 2 semesters (5* + 5*).

Year 2								
A' Semester								
1.	Compulsory	Web Design and UX	TE1800	4	1h	13	52	10*
2.	Optional	Contextual Studies	TE1000	2	1h	13	26	5*
3.	Compulsory	Computer Graphics	TE1803	2	1h	13	26	5*
4.	Compulsory	Interaction Design	TE1XXX	2	1h	13	26	5*
5.	Compulsory	Web Development	TE1888	2	1h	13	26	5*
6.	Optional	Multimedia Production	TE1775	2	1h	13	26	5*
7.	Optional	Video Production	TE1772	3	1h	13	39	5*
8.	Optional	Audio Production	TE1771	2	1h	13	26	5*
B' Semester								
1.	Compulsory	Web Design and UX	TE1800	4	1h	13	52	10*
2.	Optional	Contextual Studies	TE1000	2	1h	13	26	5*
3.	Compulsory	Computer Graphics	TE1803	2	1h	13	26	5*
4.	Compulsory	Interaction Design	TE1XXX	2	1h	13	26	5*
5.	Compulsory	Web Development	TE1888	2	1h	13	26	5*
6.	Optional	Multimedia Production	TE1775	2	1h	13	26	5*
7.	Optional	Video Production	TE1772	3	1h	13	39	5*
8.	Optional	Audio Production	TE1771	2	1h	13	26	5*

*The ECTS indicates the equivalent student workload per semester.

The students will receive the 10 ECTS of the module further to successful completion of the 2 semesters (5* + 5*).

Year 3								
A' Semester								
1.	Compulsory	Application Design & Delivery	TE2800	4	1h	13	52	15*
2.	Compulsory	Graphic Communication	TE2803	4	1h	13	52	10
B' Semester								
1.	Compulsory	Application Design & Delivery	TE2800	4	1h	13	52	15*
1.	Compulsory	Data Driven Applications	TE2888	4	1h	13	52	10
2.	Optional	Professional Practice	TE2000	3	1h	13	39	10
3.	Optional	Video Post-Production	TE2775	3	1h	13	39	10
4.	Optional	Code for Design	TE2801	4	1h	13	52	10
5.	Optional	Social Media Management	TE2XXX	3	1h	13	39	10

*The ECTS indicates the equivalent student workload per semester.

The students will receive the 30 ECTS of the module further to successful completion of the 2 semesters (15* + 15*).

Year 4								
A' Semester								
1.	Compulsory	Portfolio Projects	TE3001	3	1h	13	39	10*
2.	Compulsory	User Experience Design	TE3800	2	1h	13	26	5*
3.	Compulsory	Enterprise Development & Production	TE3009	3	1h	13	39	10*
5.	Optional	Research Project	TE3000	1	1h	13	13	5*
6.	Optional	Work as Practice	PV3981	2	1h	13	26	5*
7	Optional	Data Management	TE3XXX	2	1h	13	26	5*
B' Semester								
1.	Compulsory	Portfolio Projects	TE3001	3	1h	13	39	10*
2.	Compulsory	User Experience Design	TE3800	2	1h	13	26	5*
3.	Compulsory	Enterprise Development & Production	TE3009	3	1h	13	39	10*
5.	Optional	Research Project	TE3000	1	1h	13	13	5*
6.	Optional	Work as Practice	PV3981	2	1h	13	26	5*
7	Optional	Data Management	TE3XXX	2	1h	13	26	5*

*The ECTS indicates the equivalent student workload per semester.

The students will receive the 10 ECTS of the module further to successful completion of the 2 semesters (5* + 5*).

University of Central Lancashire
UCLan Cyprus

Course Title	**Interaction Design**				
Course Code	**TE1XXX**				
Course Type	**Compulsory**				
Level	Level 5				
Year / Semester	Year 2 / Semester 1 & 2				
Teacher's Name	Vesela Popova				
ECTS	10 ECTS	Lectures / week	1	Laboratories / week	1
Course Purpose and Objectives	This module aims: a) To provide students with opportunities to develop a good foundation in interaction design principles and industry standard prototype, mock-up, user flow and task flow tools. b) Examine the methodology and models of processes including requirement analysis, design, and testing of Interactive Web Systems and their users. c) Build awareness of the various approaches and techniques used in Usability evaluation. d) To help students recognise and build industry level skills and knowledge in preparation for future work experience and employment.				
Learning Outcomes	On successful completion of this module a student will be able to: 1. Recognise and evaluate appropriate prototyping trends, techniques and methods. 2. Apply a range of prototyping user flow and task flow design tools, requirement analysis techniques, testing and evaluation methods effectively. 3. Carry out collection and analysis of User Needs and Requirements. 4. Plan, design and develop effective Web and Smartphone application user flows and task flows according to user requirements and needs.				
Prerequisites	NONE	Required	NONE		
Course Content	The students will be introduced to the key tenants of interaction design and the principles of user understanding and web system requirements analysis, in order to design user centred prototypes, mock-ups, User Interfaces (UI) task flows and user flows.				

	Students will explore the current trends and technologies that influence the design of User Centred UIs and flows for web/smartphone applications, in order to develop an understanding of the subject area. In this module students will learn how to design and deliver effective, clear, accessible and visually appropriately designed user flows, prototypes and mock-ups of Web/Smartphone Interactive applications using industry standard tools. The students will develop knowledge in prototyping techniques, user analysis, user flow and UI design tools and techniques, in order to produce optimised solutions that effectively meet the needs and requirements of users and clients. Students will apply industry best practice in the planning and delivery of prototypes and mock-ups that take into account realistic user scenarios.
Teaching Methodology	This module offers a generally practical approach to learning interactive application design and delivery. Students will attend lectures, seminars and laboratory sessions in preparation for practical coursework. They will undertake a series of formatively assessed practical exercises, applying methods explored in lectures and lab-based demonstrations. Their learning will be supported by access to on-line materials and development systems. To encourage communication and help underpin the multidisciplinary nature of the module, students will work in small groups for some practical exercises and in the delivery of one piece of assessed coursework. They will also be expected to make a short presentation explaining their methods and approach to the research and development of solutions. Assignment briefs will be designed to allow students to demonstrate their knowledge, understanding and application of relevant methods.
Bibliography	Adobe XD Classroom in a Book (2020 release) by Brian Wood (Author) ISBN-10: 0136583806 ISBN-13: 978-0136583806 About Face 3: The Essentials of Interaction Design, Third Edition by Alan Cooper (Author), Robert Reimann (Author), and Dave Cronin (Author) ISBN-10: 0470084111 ISBN-13: 978-0470084113 UX Research: Practical Techniques for Designing Better Products by Brad Nunnally (Author) ISBN-10: 149195129X ISBN-13: 978-1491951293 Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability by Steve Krug (Author) ISBN-10: 9780321965516

<table>
<tr><td></td><td>ISBN-13: 978-0321965516

Interviewing Users: How to Uncover Compelling Insights by Steve Portigal (Author)
ISBN-10: 193382011X
ISBN-13: 978-1933820118

Designing for Interaction: Creating Innovative Applications and Devices (Voices That Matter) by Dan Saffer (Author)
ISBN-10: 0321643399
ISBN-13: 978-0321643391

Sketching User Experiences: Getting the Design Right and the Right Design by Bill Buxton (Author)
ISBN-10: 0123740371
ISBN-13: 978-0123740373

Interaction Design: Beyond Human-Computer Interaction, 5th Edition by Helen Sharp, Jennifer Preece, Yvonne Rogers (Authors)
ISBN: 978-1-119-54725-9</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><th>Number of Assessments</th><th>Form of Assessment</th><th>% weighting</th><th>Size of Assessment/Duration/ Wordcount</th><th>Category of assessment</th><th>Learning Outcomes being assessed</th></tr>
<tr><td>1</td><td>Individual Brief</td><td>40%</td><td>1500 words</td><td>Coursework</td><td>1,2,3,</td></tr>
<tr><td>1</td><td>Group Brief</td><td>60%</td><td>1500 words
+ 15 minutes presentation</td><td>Coursework</td><td>1,2,3,4</td></tr>
</table>
To pass you must achieve a grade of 40% or above aggregated from all the assessments

that you undertake for this module.</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>

Course Title	**Social Media Management**				
Course Code	**TE2XXX**				
Course Type	Optional				
Level	Level 5				
Year / Semester	Year 3 / Semester 2				
Teacher's Name	Christos Karpasitis				
ECTS	10 ECTS	Lectures / week	1	Laboratories / week	2
Course Purpose and Objectives	The aim of this module is to provide learners with the skills and knowledge to understand Social Media Marketing & Management concepts and techniques together with key factors in implementation, measurement and evaluation of successful Social Media campaigns. Moreover, it aims to provide students with: • A sound understanding of both theory and practice of Social Media Marketing • Opportunities to develop a good foundation in Social Media Management principles and industry standard Social Media Analysis methods and tools. • Confidence and ability to discuss the use and importance of Social Media and Networks in Digital Marketing. • Awareness of the various approaches and techniques used in Social Media Management. • An ability to make Social Media Management decisions using case study material.				
Learning Outcomes	On successful completion of this module a student will be able to: 1. Create Social Media content utilising various Social Media platforms. 2. Describe the Social Media Activities of a designated company, contrast with best practices and formulate recommendations for improvements. 3. Plan and design appropriate Social Media Marketing Campaigns based on specific objectives. 4. Explain the Social Media Monitoring and Analytics tools that a company can employ to monitor engagement.				
Prerequisites	NONE	Required	NONE		

Course Content	The students will be introduced to the key principles and concepts of Social Media Marketing and the principles of managing Social Media accounts for businesses and organisations. Various Social Media and Networks will be explored, in addition to their similarities and differences. It will place Social Media Management in perspective and define a range of Social Media Marketing strategies. The module will also cover both, the theoretical and practical sides of topics, including: Social Media Research Social Media Campaign Development Social Media Advertising Social Media Monitoring and Analysis Social Media Analytics Social Media Data Visualisation Social Media Reporting Social Media PR and Reputation Management Social Media Relationship Management Influencer Marketing
Teaching Methodology	This module offers a generally practical approach to learning the fundamentals of Social Media Marketing and Management. During lectures, students are introduced to theory and principles, through presentations, video resources, case studies and inspection of Social Media Strategies and Business Pages. Lectures are collaborative with class input and practical components are often part of the lectures themselves. During the lab sessions, a combination of teaching approaches will aid effective learning. Students will have the ability to examine and assess real-world examples, while planning their own Social Media campaigns and strategies. In order to encourage communication and help underpin the multidisciplinary nature of the module, during lab sessions, students will also have the opportunity to work in small groups for some practical exercises. This will allow them to share their knowledge while also developing collaborative skills. Since this is a skills-based course, the assessment is focused on both, knowledge content and skills. Assignment briefs will be designed to allow students to demonstrate their knowledge, understanding and application of relevant methods. As part of their assessment, they will also be expected to make a presentation explaining their selected methods and approach to the investigation and development of solutions for a specific Social Media Management related scenario.
Bibliography	Social Media Marketing by Tracy L. Tuten (Author) ISBN-10: 1529731984 ISBN-13: 978-1529731989

<table>
<tr><td></td><td>Ultimate Guide to Social Media Marketing by Eric Butow (Author), Jenn Herman (Author), Stephanie Liu (Author), Amanda Robinson (Author), Mike Allton (Author)
ISBN-10: 0136583806
ISBN-13: 978-0136583806

How to Measure Social Media: A Step-By-Step Guide to Developing and Assessing Social Media ROI
ISBN-10: 0789749858
ISBN-13: 978-0789749857

Social Media Campaigns: Strategies for Public Relations and Marketing
ISBN-10: 1138948608
ISBN-13: 978- 1138948600</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><th>Number of Assessments</th><th>Form of Assessment</th><th>% weighting</th><th>Size of Assessment/Duration/ Wordcount</th><th>Category of assessment</th><th>Learning Outcomes being assessed</th></tr>
<tr><td>1</td><td>Individual Brief</td><td>40%</td><td>25 minutes presentation</td><td>Coursework</td><td>1,2,3,4</td></tr>
<tr><td>1</td><td>Individual Brief</td><td>60%</td><td>2500 words</td><td>Coursework</td><td>1,2,3,4,5,6</td></tr>
</table>

To pass you must achieve a grade of 40% or above aggregated from all the assessments
that you undertake for this module.</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>

Course Title	**Data Management**				
Course Code	**TE3XXX**				
Course Type	**Optional**				
Level	Level 6				
Year / Semester	Year 4 / Yearlong				
Teacher's Name	TBC				
ECTS	10 ECTS	Lectures / week	1	Laboratories / week	1
Course Purpose and Objectives	To provide students with opportunities to develop a good understanding in concepts and principles of modern data management. To introduce techniques and tools of modern data representation and data management.. To help develop students' practical competencies in handling datasets. To develop student skills in understanding and using modern backend systems using programmatic or REST-based APIs.				
Learning Outcomes	On successful completion of this module a student will be able to: 1. Identify and apply current data management techniques. 2. To develop students' knowledge and understanding on data workflows between frontends and backend databases. 3. Identify and understand current backend technologies. 4. To develop students' skills to choose the most appropriate means of storing and managing data, depending on the size and structure of a particular dataset and its intended use.				
Prerequisites	NONE	Required	NONE		
Course Content	The module provides students with a broad overview of the different tools, techniques and concepts of modern data management and analysis. A comparison between traditional relational databases, SQL and alternative models (NoSQL databases) is presented. Moreover, the module develops a basic understanding of how the backend of web applications works with databases, while also getting familiar with the data workflows between the databases and the frontend. In this context the module covers commodity commercial backends (such as Firebase) as well as common backend architectures (such as node.js with an SQL database). As part of this module, students are introduced to the following areas: **Data Organization**				

<table>
<tr><td></td><td>Students acquire a basic understanding of entities and relationships (tabular organization of data) and NoSQL approaches (document kind of relationships). Also, SQL and its main features are briefly discussed.

Data Management Concepts

Three main topics in data management are introduced: Data Integrity, Transaction Management (ACID), Data Architectures and Data Access (CRUD) and REST-based interfaces.

Operational Concepts

Students are introduced to common commercial backend options (such as Firebase) and common architectures (such as node.js and SQL). They develop skills in understanding and assessing different options, and selecting the most suitable based on the characteristics of intended use.

Ethical and legal issues

Ethical and legal issues involved in storing and managing data collections are discussed. Covered topics include privacy, ownership, intellectual property and licensing issues in data collection, management, retrieval and reuse.</td></tr>
<tr><td>Teaching Methodology</td><td>This module presents a general, practical approach to data management. It includes weekly sessions incorporating a mixture of lecture delivery, and in-class practical work. A series of practical exercises are designed to reinforce the lecture material and are central to the success of students learning in this module.

A variety of engagement activities are incorporated to give students an opportunity to both learn and demonstrate their understanding in a way that goes beyond just creating deliverables.

Real-world datasets are used and analysed during both lectures and seminars, enabling students to translate their theoretical understanding into practical solutions

Guest speakers are invited to talk about their area of expertise and give guidance and industry insight to the ways that data can be managed and used.</td></tr>
<tr><td>Bibliography</td><td>Designing Data-Intensive Applications: The Big Ideas Behind Reliable, Scalable, and Maintainable Systems 1st Edition by Martin Kleppmann, ISBN-10: 1449373321

Data Management and Analysis: Case Studies in Education, Healthcare and Beyond (Studies in Big Data Book 65) 1st Edition by Alhajj (Author), Reda Alhajj (Editor), Mohammad Moshirpour (Editor), Behrouz Far (Editor), ISBN-13: 978-3030325862

Building Data Products Introduction to Data and Analytics Engineering for Non-Programmers by Brian McMillan (Author), ISBN-10: 1737536536</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><th>Number of Assessments</th><th>Form of Assessment</th><th>% weighting</th><th>Size of Assessment/Duration/ Word count (indicative only)</th><th>Category of assessment</th><th>Learning Outcomes being assessed</th></tr>
<tr><td>1</td><td>Technique Portfolio</td><td>50%</td><td>Equivalent of 2000 words</td><td>Coursework</td><td>1, 2, 4</td></tr>
</table>
</td></tr>
</table>

	1	Exam	50%	1.5 hours	Examination	2,3,4
	Pass Mark 40% (average of all components)					
Language	English					

Course Title	**Web Development**				
Course Code	**TE1888**				
Course Type	**Compulsory**				
Level	Level 5				
Year / Semester	Year 2 / Semester 1 & 2				
Teacher's Name	Antonis Savva				
ECTS	10 ECTS	Lectures / week	1	Laboratories / week	1
Course Purpose and Objectives	To provide students with opportunities to develop a good foundation in web development principles and industry standard development tools. To introduce a structured approach to design, development and testing of web applications. To help develop students' practical competencies in the fundamentals of web programming.				
Learning Outcomes	On successful completion of this module a student will be able to: 1. Identify and describe current web development techniques and methods. 2. Design and Develop an interactive web application to a defined set of requirements. 3. Identify and implement best practice in web development coding techniques with a view enhancing employability in the web development industry 4. Write effective documentation for developers and users.				
Prerequisites	NONE	Required	NONE		
Course Content	In this module students will learn how to develop and deliver effective user interfaces and interactive content for web sites. Students will develop useful documentation at different levels of complexity as required by co-developers and for supporting users. Students will be introduced to programming concepts using JavaScript together with use of HTML and CSS to provide a basis for developing interactive web pages by means of the Document Object Model (DOM). They will also learn to develop basic skills in scripted drawing and how to use cold libraries and APIs Core programming concepts covered will include datatypes, operators and operands, strings, Booleans, variables, arrays, functions, objects, events, listeners, classes and id's.				

<table>
<tr><td></td><td>Students will also learn how each of the three layers of web development relate to each other and how to correctly implement them in an application.

The portfolio is completed under observation in the classroom and forms part of the module assessment in order to enable students to develop their basic technical competencies prior to developing a complete application in the assignment.</td></tr>
<tr><td>Teaching Methodology</td><td>This module presents a generally practical approach to interactive application design and implementation. There are weekly classes incorporating a mixture of lecture delivery, in-class practical work. A series of practical exercises are scheduled to reinforce the lecture material and are central to the success of students learning in this module.

Not all learning activities are computer based and a variety of engagement activities are incorporated to give students opportunity to both learn and demonstrate their understanding in a way that goes beyond just creating deliverables.

Methods for good working practice in application design will be encouraged, including techniques for successful error handling, testing and debugging of applications. Students will also develop their skills in solving user requirement and coding problems.

Assignment briefs will allow students to demonstrate their understanding and application of the relevant coding techniques in the development of web sites built to deliver specific design functionality.

Students are required to attend all timetabled learning activities for this module. Participation in seminars and workshops is important for both their learning experience and that of their classmates.</td></tr>
<tr><td>Bibliography</td><td>The module reading list can be found at:

http://readinglists.central-lancashire.ac.uk/index.html</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><th>Number of Assessments</th><th>Form of Assessment</th><th>% weighting</th><th>Size of Assessment/Duration/
Word count
(indicative only)</th><th>Category of assessment</th><th>Learning Outcomes being assessed</th></tr>
<tr><td>1</td><td>Technique Portfolio</td><td>60%</td><td>Equivalent of 2000 words</td><td>Coursework</td><td>1, 3</td></tr>
<tr><td>1</td><td>Prototype</td><td>40%</td><td>Equivalent of 1500 words</td><td>Coursework</td><td>2,3,4</td></tr>
<tr><td colspan="6">Pass Mark 40% (average of all components)</td></tr>
</table>
</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>

Course Title	**Data Driven Applications**				
Course Code	**TE2888**				
Course Type	**Compulsory**				
Level	Level 5				
Year / Semester	Year 3 / Semester 2				
Teacher's Name	Nearchos Paspallis				
ECTS	10 ECTS	Lectures / week	2	Laboratories / week	2
Course Purpose and Objectives	• To develop students' knowledge and understanding of data-driven applications. • To develop students' capability to create a data-driven applications and content management systems. • To identify and understand the various programming paradigms in creating structured data driven and controlled applications for delivery on the web				
Learning Outcomes	On successful completion of this module a student will be able to: 1. Research, identify and analyse data-driven applications. 2. Identify, use and evaluate different tools, technologies and techniques used to dynamically link data to a user interface. 3. Design, build and critically evaluate a data-driven application considering the needs of users, clients and stakeholders. 4. Demonstrate an understanding of the key principles and architectures in creating data driven web applications				
Prerequisites	TE1888	Required	NONE		
Course Content	In this module students will learn how data-driven websites work and build one using industry standard tools and techniques. Typical open source technologies and languages used include PHP, MySQL, Json, XML, JavaScript and Local Storage. The module will explore dynamic data collection, storage, retrieval and manipulation in structured applications. The students will explore the various techniques and topologies of dynamic data driven web applications to understand, design, develop and implement their own applications to a specific brief. The approach will encompass the research and analysis of existing web sites and recognition of best practice in dynamic application architecture design including a 3-tier approach to system design.				

<table>
<tr><td></td><td>In addition to writing their own coded examples, the students will also learn to design, deploy and customise industry standard website content managements systems using the knowledge gained throughout the module.

Supported lab work will include collecting and validating data through web forms, database design and administration, dynamically manipulated data and content, server-side scripting and debugging.</td></tr>
<tr><td>Teaching Methodology</td><td>Lectures and assessed exercises will provide students with an appropriate knowledge base. Supporting online tutorials and examples will support students' learning, by introducing the relevant programming techniques and best practice in constructing an application from them.

Students will also learn how to analysis and evaluate existing applications with a view to assessing their functionality and usability. They will also learn how to plan, document and critically evaluate their own applications in the workshop sessions.

Real world applications will be developed with the aid of open source cms software and frameworks, enabling students to translate their theoretical understanding into practical solutions.

Guest speakers will be invited to talk about their area of expertise and give guidance to the ways applications using stored data can be planned an implemented.

Completed designs will undergo formative peer review as part of the development process.</td></tr>
<tr><td>Bibliography</td><td>See: http://readinglists.central-lancashire.ac.uk/lists/08E97FCC-E438-4947-5A3C-1972E649142C.html</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><th>Number of Assessments</th><th>Form of Assessment</th><th>% weighting</th><th>Size of Assessment/Duration/ Wordcount (indicative only)</th><th>Category of assessment</th><th>Learning Outcomes being assessed</th></tr>
<tr><td>1</td><td>Practical Portfolio</td><td>35%</td><td>1500 words</td><td>Coursework</td><td>1,2</td></tr>
<tr><td>1</td><td>Prototype</td><td>65%</td><td>2500 words</td><td>Coursework</td><td>2,3,4</td></tr>
</table>

Pass Mark 40% (must be achieved in every component)</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>