LIVERPOOL JOHN MOORES UNIVERSITY

Database Systems

Module Information

2022.01, Approved

Summary Information

Module Code	5102COMP
Formal Module Title	Database Systems
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	33
Practical	22

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To implement relational database designs using modern database management systems. To utilize database connectivity technologies in developing data driven applications. To introduce database administration tasks and the key concepts of data management, quality and security. To investigate database systems in the context of business intelligence.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Implement relational database designs and query them using SQL.
MLO2	2	Develop data driven applications.
MLO3	3	Perform database administration tasks.
MLO4	4	Evaluate the role of database systems in supporting business intelligence.

Module Content

Outline Syllabus	DBMS Architecture SQL Components & DDL (for Tables) DML (for basic SELECT) DML (for JOINS & INSERT - UPDATE - DELETE) Views & Indices (DDL & DML) SPROCs & Triggers (DDL & DML) Connectivity Client Server vs Embedding DBs Connectivity APIs DBMS Administration Security Availability Optimization Business Intelligence Alternate DBMS / Big Data
Module Overview	
Additional Information	This module explores the implementation of database systems through an examination of modern database management systems, the SQL language and database connectivity APIs. The module continues by exploring the managerial considerations of large scale database systems as well as the emergent fields of business intelligence and data analytics.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Artefacts	SQL Development	50	0	MLO1, MLO2
Centralised Exam	Exam	50	2	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Glyn Hughes	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings