COURSE DETAIL

SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING
Country United Kingdom - England
Host Institution University of London, Queen Mary
Program(s) University of London, Queen Mary
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 144
UCEAP Course Suffix
UCEAP Official Title SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING
UCEAP Transcript Title SEMI-STRUCTURD DATA
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

In this course, student learn to process XML (with XSLT and Java), to model data with XML (XML native, RDF), and to query XML data (XQuery). The course teaches many concepts of data modelling and knowledge representation that are beyond the syntactic issues of XML or RDF. The knowledge students acquire in the course is fundamental to the many data design and data analytics tasks occurring in todays IT and business landscapes. The second part of the course is dedicates to advanced DB concepts including active databases, mobile databases, spatial and temporal databases, triggers, performance tuning, distributed databases, and indexing and query optimization. The third part of the course covers the modern, agile world of data processing: NoSQL. It is about the processing of semi-structured data, transforming data streams into formats (triplets, JSON) to be processed by new DB systems (e.g. MongoDB, CouchDB).

Language(s) of Instruction
English

Host Institution Course Number
ECS789P

Host Institution Course Title
SEMI-STRUCTURED DATA AND ADVANCED DATA MODELING

Host Institution Course Details
https://www.qmul.ac.uk/modules/

Host Institution Campus
Queen Mary

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electronic Engineering and Computer Science

Course Last Reviewed
2023-2024

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