Liverpool John Moores University

Title:	MULTIMEDIA DEVELOPMENT WORKSHOP
Status:	Definitive
Code:	**6011COMP** (102981)
Version Start Date:	01-08-2011
Owning School/Faculty:	Computing and Mathematical Sciences
Teaching School/Faculty:	Computing and Mathematical Sciences

Team	Leader
Yuanyuan Shen	Y

Academic Level:	FHEQ6	**Credit Value:**	12.00	**Total Delivered Hours:**	36.00
Total Learning Hours:	120	**Private Study:**	84		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	4.000
Practical	32.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report	100.0	

Aims

To increase the student's insight into the selection and use of appropriate analysis and design methods applicable to multimedia systems development and to develop their expertise in the use of these methods and associated developmental tools.
To provide an insight into the workings of multimedia information retrieval (IR) systems.

Learning Outcomes

After completing the module the student should be able to:

1 Assess the suitability of various requirements analysis methods and tools for a range of real-world multimedia applications.
2 Explain and apply the relationship between requirements analysis and an appropriate design.
3 Explain and apply the techniques involved in the implementation of a multimedia system product through properly controlled project management procedures.
4 Assess the quality control procedures employed in a project implementation.
5 Appreciate the techniques and challenges behind large-scale, multimedia storage systems and the information retrieval techniques used.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Report	1	2	3	4	5

Outline Syllabus

The syllabus consists of a suitable case study of a digital video library in which the various aspects are investigated. The students will follow the case study through its complete lifecycle. The case study will be based on the implementation of a large-scale digital library and will serve to integrate the following aspects: Automatically extracting information from digital video, using the following video processing techniques: Speech processing, Image processing, Information retrieval. Creating interfaces allowing users to search for and retrieve video based upon extracted information using: Headlines, Thumbnails, Filmstrips, and Skims etc.

Learning Activities

Includes attending lectures and lab sessions as well as reading handouts, papers and tools.

References

Course Material	Book
Author	Barfield, L.
Publishing Year	2004
Title	Design for New Media : Interaction design for Multimedia and the Web
Subtitle	
Edition	
Publisher	Addison Wesley
ISBN	

Course Material	Book
Author	Sagarmay, D.
Publishing Year	2004
Title	Multimedia Systems and Content-based Image Retrieval
Subtitle	
Edition	
Publisher	Hershey, PA
ISBN	

Course Material	Book
Author	Various
Publishing Year	0
Title	Case study documentation, other appropriate tools, software documentation and literature
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	England,E. and Finney, A.
Publishing Year	2001
Title	Managing Multimedia: Project Management for Interactive Media
Subtitle	
Edition	3rd Edition
Publisher	Addison Wesley Longman
ISBN	

Course Material	Book
Author	Burke, M.A.
Publishing Year	1999
Title	Organization of Multimedia Resources:
Subtitle	Principles and Practice of Information Retrieval
Edition	
Publisher	Gower
ISBN	

Notes

Vast libraries of information will soon be available on the internet as a result of emerging technologies for multimedia data processing. However, to be effective, new technology is needed for searching through these vast data collections and retrieving the relevant selections. This module covers the specification, design and implementation issues relating to real-world multimedia systems by looking at modern information retrieval (IR) systems.