Software Engineering Development Workshop

Module Information

2022.01, Approved

Summary Information

Module Code	7116COMP
Formal Module Title	Software Engineering Development Workshop
Owning School	Computer Science and Mathematics
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	1
Workshop	33

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	To provide the students with an opportunity to practice the principles of structured development using a set of appropriate software engineering tools, techniques and methods, and consolidate learning from proceeding modules.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Plan an appropriate high-level development strategy.
MLO2	2	Develop the necessary quality control and testing procedures.
MLO3	3	Generate the appropriate design techniques to produce a suitable design.
MLO4	4	Implement the design using an appropriate development environment.
MLO5	5	Critically reflect on the development process including professional and ethical issues.

Module Content

Outline Syllabus	The students will work in a problem-based learning mode where they will be given an outline brief to development and deliver a medium-sized application. They will be required to work independently in teams to develop the requirements specification, design documents, implementation and testing plans of the application. They will be required to manage their development schedule and make predictions about theexpected effort. They will also work within the BCS Code of Conduct for professionaldevelopers and reflect on this in their documentation. Workshop sessions will be scheduled by the students following an introductory lecture on problem based learning and Software EngineeringSystem Identification and its wider context. Requirements gathering and analysis, Design Specification, Implementation Plan and Testing and Release planning .
Module Overview	
Additional Information	The module uses a mini project done in groups to consolidate earlier learning. The project will follow all stages of the software development life cycle to produce a prototype application. The students will also examine the implications of the BCS Code of Practice and the Principles of Data Protection in their work. The following are examples of the type of exercises used: Project plan for embedded software for a Vending Machine. Exercises using a CASE tool for project implementation and control.The Design and implementation of an e-commerce software catalogue.Individual marks are determined by peer assessment.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Artefacts	System development	100	0	MLO1, MLO2, MLO3, MLO4, MLO5

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Hoshang Kolivand	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings