2024 / 25

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South East Technological University

Module Descriptor

Website Development 2 (Computing and Mathematics)

Website Development 2 (A13664)

Short Title: Website Development 2
Department: Computing and Mathematics
Credits: 5 **Level:** Introductory

Description of Module / Aims

In this module, the student will develop the core technical skills necessary for a complete understanding of client side web development. This module will examine the concepts involved in front-end user interface design and client side scripting. The module will focus on the development of dynamic interactive client side web applications. The use of client side frameworks, client side libraries and plugins will also be examined.

Programmes

		stage/semester/status
COMP-0594	BSc (Hons) in Creative Computing (WD_KCRCO_B)	2 / 3 / M
COMP-0594	BSc (Hons) in Software Engineering (WD_KDEVP_BI)	1 / 2 / M
COMP-0594	BSc (Hons) in Software Systems Development (WD_KDEVP_B)	1 / 2 / M
COMP-0594	BSc in Applied Computing (WD_KCOMP_D)	2 / 3 / M
COMP-0594	BSc in Multimedia Applications Development (WD_KMULA_D)	2 / 3 / M
COMP-0594	BSc in Software Systems Development (WD_KCOMC_D)	1 / 2 / M

Indicative Content

- Basic Scripting: Variables; Functions; Conditions; Loops and Repetition; Arrays
- The Document Object Model: Nodes; Manipulation; Scripting; Event Handling
- Storing and transporting data with JavaScript Object Notation (JSON)
- Use of libraries and plugins
- Forms Enhancements and Validation
- Role of Client Web Frameworks & Cascading Style Sheets (CSS) meta languages
- Client side routing
- Dynamic Web: Combining Content; Presentation; and Behaviour

Learning Outcomes

On successful completion of this module, a student will be able to:

1. Plan and construct dynamic websites incorporating client side scripts.
2. Construct dynamic interactive websites that support user interaction, feedback, and validation.
3. Use client side libraries and plugins in the design of dynamic websites.
4. Apply a client web framework in the design of interactive websites.
5. Employ the client side components in a web application.

Learning and Teaching Methods

- The lectures will introduce the theory content to the student. The student will be encouraged to participate in class discussions and ask questions to support their learning process.
- The practical classes facilitate the student in implementing the theory learned in the lectures.

Learning Modes

Learning Type	F/T Hours	P/T Hours
Lecture	24	12
Practical	36	12
Independent Learning	75	111

Assessment Methods

	Weighting	Outcomes Assessed
Continuous Assessment	100%	
Assignment	40%	1,2,3
Assignment	40%	4,5
Portfolio	20%	1,2,3,4,5

Assessment Criteria

<40%: Unable to interpret and describe key concepts of dynamic client side application development.

40%–49%: Be able to interpret and describe key concepts of dynamic client side application development.

50%–59%: Ability to discuss key concepts of dynamic client side application development and ability to discover and integrate related knowledge in other knowledge domains.

60%–69%: Be able to solve dynamic client side application development problems by experimenting with the appropriate skills and tools.

70%–100%: All the above to an excellent level. Be able to analyse and design solutions to a high standard for a range of both complex and unforeseen problems through the use and modification of appropriate skills and tools.

Supplementary Material(s)

- "Tutorialspoint." http://www.tutorialspoint.com
- "w3schools." http://www.w3schools.com
- McFarland, D. *JavaScript & jQuery:The Missing Manual*. 3rd.. California: O'Reilly Media, 2014.
- Pehlivanian, A. and D. Nguyen. *Jump Start JavaScript*. Melbourne: Sitepoint, 2013.

Requested Resources

- Room Type: Computer Lab