

OLLSCOIL NA hÉIREANN
THE NATIONAL UNIVERSITY OF IRELAND, GALWAY

SEMESTER 2 EXAMINATIONS 2000-2001

HIGHER DIPLOMA (SOFTWARE DESIGN AND DEVELOPMENT)

CT863 INTERACTIVE MULTIMEDIA TECHNOLOGIES

Professor D. Bell
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Mr. A. Reilly

Time allowed: TWO hours
Answer 4 questions. All questions carry equal marks

Q1 (a) Discuss how the use of multimedia can enhance traditional business software applications. (7)

(b) (i) Outline briefly the computer hardware needed to capture and convert analogue audio into digital signals. (4)

(ii) Describe the process of capturing digitised audio for use in a multimedia application, outlining the choices available to the sound engineer. (8)

(iii) Explain the differences between digitised and synthesised audio. (6)

Q2 Describe, with the aid of a diagram, the types of skilled personnel required to develop a multimedia application, writing short notes on the various members of the development team. (25)

Q3 (a) Discuss what is involved in the planning of a multimedia project. (12)

(b) Describe, with the aid of a diagram, the phases of a multimedia development project. (13)

Q4 Write notes on 3 of the following: (25)

- (a) Multimedia authoring tools
- (b) Legal issues in multimedia production
- (c) Jakob Nielsen's usability heuristics
- (d) dynamic HTML technologies
- (e) Distribution of multimedia applications

Q5 (a) (i) Describe the structure of a basic HTML page. (4)
(ii) Compose an example personal home page to illustrate how to incorporate both basic document formatting and multimedia effects into a page. (11)

Note: Table of HTML tags provided below.

- (b) Describe the guidelines a web designer should follow when developing a new web site. (10)

Type	Tag	Attributes
Formatting		SIZE, FACE, COLOR
	<DIV>	ALIGN
	, <I>, <U>, , <HR>, <H1>-<H6>, <P>	
Hyperlink	<A>	HREF
Image		WIDTH, HEIGHT, ALT, SRC, BORDER, ALIGN, USEMAP
Image map	<MAP>	NAME
	<AREA>	SHAPE, COORDS
Table	<TABLE>	BORDER, BGCOLOR, ALIGN, WIDTH
	<TR>	ALIGN, VALIGN
	<TD>	ALIGN, VALIGN, COLSPAN, ROWSPAN
Miscellaneous	<APPLET>	WIDTH, HEIGHT, CODE, CODEBASE, NAME, ALT ALIGN
	<PARAM>	NAME, VALUE
	<EMBED>, <BGSOUND>	SRC, LOOP