

GCE Software Systems Development

Subject Guidance for Summer 2022

Unit AS 2: Event Driven Programming

Exceptional Assessment Adaptations for Summer 2022



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1. Introduction

On 17 May 2021 the Education Minister, Peter Weir MLA, announced a return to public examinations during the next academic year, along with significant reductions in the assessment requirements across a range of CCEA qualifications.

In a number of subjects at both AS and A Level, he announced that internal assessment tasks would be reduced rather than a unit being omitted. This document sets out these changes to GCE Software Systems Development AS Unit 2 for Summer 2022 only, emanating from this decision.

The total marks available for this task will be 50. The unit will continue to carry a weighting of 50% of AS.

2. Task Requirements for Summer 2022

This unit provides students with an opportunity to implement and develop object oriented technologies in an event driven environment. Students are able to state requirements and design, implement, test and evaluate their application. This unit is internally assessed.

Content	Marks
<p>You must produce an event driven application (possibly a game or a quiz) and associated documentation that includes the following:</p> <ul style="list-style-type: none"> • An introduction/background to the problem; • A statement of the requirements of the application; • One set of storyboards showing the design process and the forms to be included in the GUI. The storyboard should include modifications made in the development process; • An explanation of the design of your solution including reference to and implementation of events, triggers buttons, key presses and mouse clicks as well as the design and implementation of multiple forms, menus and toolbars as applied to the solution. The explanation should demonstrate how an object application is linked to simple files; • Client feedback on the design of the application; • A test plan demonstrating the required concepts; • The development and implementation of the solution; • An evaluation of the test plan to include evidence of implementation of the test plan, recording only failed tests and corrective action taken if applicable; • A critical evaluation of the solution to the problem in terms of the initial requirements; and • Your solution and all accompanying documentation must be submitted in electronic format. 	
Total marks	50

3. Further Advice and Information

If you require further information, please contact:

CCEA Helpline	helpline@ccea.org.uk Telephone: 028 9026 1220
Subject Officer	Andrew Douglas adouglas@ccea.org.uk
Specification Support Officer	Nuala Tierney ntierney@ccea.org.uk
CCEA Entries	entriesandresults@ccea.org.uk

4. AS 2 EVENT DRIVEN PROGRAMMING – ASSESSMENT CRITERIA AND MARK BANDS FOR SUMMER 2022

Assessment Objective	Level 1 Basic	Level 2 Satisfactory	Level 3 Good	Level 4 Excellent	Total
AO1	<p>Marks [1]–[3]</p> <p>Candidate demonstrates basic knowledge and understanding of the requirements of the system. This is evidenced by the provision of a basic statement of the requirements of the application.</p> <p>Candidate demonstrates basic knowledge and understanding of the design process. This is evidenced by the provision of a basic storyboard relating to the design process.</p>	<p>Marks [4]–[6]</p> <p>Candidate demonstrates a satisfactory knowledge and understanding of the requirements of the system. This is evidenced by the provision of a satisfactory statement of the requirements of the application.</p> <p>Candidate demonstrates a satisfactory knowledge and understanding of the design process. This is evidenced by the provision of a satisfactory storyboard relating to the design process.</p>	<p>Marks [7]–[11]</p> <p>Candidate demonstrates a good knowledge and understanding of the requirements of the system. This is evidenced by the provision of a valid, clear statement of the requirements of the application.</p> <p>Candidate demonstrates a good knowledge and understanding of the design process. This is evidenced by the provision of a detailed storyboard that relates clearly to the design process and acknowledges modifications as required.</p>	<p>Marks [12]–[14]</p> <p>Candidate demonstrates an excellent knowledge and understanding of the requirements of the system. This is evidenced by the provision of a comprehensive statement of the requirements of the application.</p> <p>Candidate demonstrates an excellent knowledge and understanding of the design process. This is evidenced by the provision of a highly detailed storyboard that relates specifically to the design process and acknowledges and addresses modifications as required.</p>	14 marks available

Assessment Objective	Level 1 Basic	Level 2 Satisfactory	Level 3 Good	Level 4 Excellent	Total
<p>AO1 (cont.)</p>	<p>Candidate demonstrates basic knowledge and understanding of the development and implementation of the solution, providing a basic explanation of the event driven application. This is evidenced by an explanation showing limited understanding of triggers, multiple forms and menus and how the application is linked to simple files in the solution.</p>	<p>Candidate demonstrates satisfactory knowledge and understanding of the development and implementation of the solution by providing an appropriate explanation of the event driven application. This is evidenced by an explanation showing understanding of triggers, multiple forms and menus and how the application is linked to simple files in the solution.</p>	<p>Candidate demonstrates good knowledge and understanding of the development and implementation of the solution by providing an appropriate, valid explanation of the event driven application. This is evidenced by an explanation showing a detailed understanding of triggers, multiple forms and menus and how the application is linked to simple files in the solution.</p>	<p>Candidate demonstrates excellent knowledge and understanding of the development and implementation of the solution by providing an appropriate, valid explanation of the event driven application. This is evidenced by an explanation showing a highly detailed understanding of triggers, multiple forms and menus and how the application is linked to simple files in the solution.</p>	
	<p>Candidate shows basic knowledge and understanding of the need for a robust and dependable system. This is evidenced by the inclusion of a basic test plan.</p>	<p>Candidate shows satisfactory knowledge and understanding of the need for a robust and dependable system. This is evidenced by the inclusion of a test plan that tests navigation and some data capture.</p>	<p>Candidate shows good knowledge and understanding of the need for a robust and dependable system. This is evidenced by the inclusion of a detailed test plan that tests all navigation and some capture.</p>	<p>Candidate shows excellent knowledge and understanding of the need for a robust and dependable system. This is evidenced by the inclusion of a comprehensive test plan that tests all navigation and data capture.</p>	

Assessment Objective	Level 1 Basic	Level 2 Satisfactory	Level 3 Good	Level 4 Excellent	Total
AO2	<p>Marks [1]–[5]</p> <p>Candidate shows basic application of knowledge and skills with regard to the use of GUI objects in an event driven application. This is evidenced by the provision of a basic event driven application.</p> <p>Forms show basic evidence of understanding of the requirements of the application.</p> <p>Forms are basically ordered.</p>	<p>Marks [6]–[11]</p> <p>Candidate demonstrates satisfactory application of knowledge and skills with regard to the use of GUI objects in an event driven application. This is evidenced by the provision of a satisfactory event driven application with relevant screen shots and graphics.</p> <p>Forms show satisfactory understanding of the requirements of the application.</p> <p>Forms are logically ordered and fit for purpose as a consequence of user evaluation.</p>	<p>Marks [12]–[17]</p> <p>Candidate demonstrates good application of knowledge and skills with regard to the use of GUI objects in an event driven application. This is evidenced by the provision of a good event driven application with a good range of relevant screen shots and graphics.</p> <p>Forms show good understanding of the requirements of the application.</p> <p>Forms are logically ordered and fit for purpose as a consequence of user evaluation. This is evidenced by the accuracy, layout and organisation of the forms.</p>	<p>Marks [18]–[22]</p> <p>Candidate demonstrates excellent application of knowledge and skills with regard to the use of GUI objects in an event driven application. This is evidenced by the provision of a relevant detailed event driven application with a comprehensive range of relevant screen shots and graphics.</p> <p>Forms show excellent understanding of the requirements of the application.</p> <p>Forms are logically ordered and clearly fit for purpose as a consequence of thorough user evaluation. This is evidenced by the accuracy, layout and organisation of the forms.</p>	22 marks available

Assessment Objective	Level 1 Basic	Level 2 Satisfactory	Level 3 Good	Level 4 Excellent	Total
AO2 (cont.)	Candidate shows basic application of knowledge and skills in relation to the solution to the problem. This is evidenced by a basic solution that meets some of the user requirements in terms of screen navigation data capture and output produced.	Candidate shows satisfactory application of knowledge and skills in relation to the solution to the problem. This is evidenced by a satisfactory solution that meets most user requirements in terms of screen navigation, data capture and output produced. This is evidenced by screenshots and by reference to the code produced.	Candidate shows good application of knowledge and skills in relation to the solution to the problem. This is evidenced by a good solution that meets user requirements in terms of screen navigation, data capture and output produced. This is evidenced by a good range of screenshots and by clear reference to the code produced.	Candidate shows excellent application of knowledge and skills in relation to the solution to the problem. This is evidenced by an excellent solution that meets all user requirements in terms of screen navigation, data capture and output produced. This is evidenced by a comprehensive range of screenshots and by detailed reference to the code produced.	
	Candidate shows basic knowledge and skills in relation to testing the solution. This is evidenced by a few screenshots, demonstrating the implementation of the test plan, <u>documenting failed tests.</u>	Candidate shows satisfactory application of knowledge and skills in relation to testing the solution. This is evidenced by a range of screenshots demonstrating the implementation of the test plan <u>documenting failed tests.</u> The screenshots show all navigation and some data capture being tested.	Candidate shows good application of knowledge and skills in relation to testing the solution. This is evidenced by a good range of screenshots demonstrating the implementation of the test plan <u>documenting failed tests.</u> The screenshots show all navigation and all data capture being tested.	Candidate shows excellent application of knowledge and skills in relation to testing the solution. This is evidenced by a comprehensive range of screenshots demonstrating the implementation of the test plan <u>documenting failed tests.</u> The screenshots show all navigation and all data capture being tested.	

Assessment Objective	Level 1 Basic	Level 2 Satisfactory	Level 3 Good	Level 4 Excellent	Total		
A03	<p>Marks [1]–[3]</p> <p>Candidate demonstrates a basic understanding of analysis and evaluation of the outcomes of the testing procedures and the results obtained.</p> <p>Candidate evaluates the solutions in the final report with limited reference to initial user requirements of the solution.</p> <p>Relevant material is poorly organised and presented with a lack of clarity and coherence.</p> <p>Use of specialist vocabulary and spelling, punctuation and grammar is basic.</p>	<p>Marks [4]–[7]</p> <p>Candidate demonstrates a satisfactory analysis and evaluation of the outcomes of the testing procedures and the results obtained.</p> <p>Candidate evaluates the solutions in the final report with some reference to initial user requirements of the solution.</p> <p>Relevant material is sufficiently organised and presented with some clarity and coherence.</p> <p>Use of specialist vocabulary and spelling, punctuation and grammar is satisfactory.</p>	<p>Marks [8]–[11]</p> <p>Candidate demonstrates a good analysis and evaluation of the outcomes of the testing procedures and the results obtained.</p> <p>Candidate fully evaluates the solutions in the final report with good reference to initial user requirements of the solution.</p> <p>Relevant material is well organised and presented with a competent degree clarity and coherence.</p> <p>Use of specialist vocabulary and spelling, punctuation and grammar is good.</p>	<p>Marks [12]–[14]</p> <p>Candidate demonstrates an excellent analysis and evaluation of the outcomes of the testing procedures and the results obtained.</p> <p>Candidate comprehensively evaluates the solutions in the final report with comprehensive reference to initial user requirements of the solution.</p> <p>Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.</p> <p>Use of specialist vocabulary and spelling, punctuation and grammar is excellent.</p>	14 marks available		
	[0] marks is awarded for a response not worthy of credit					Total Marks Available	(50)