

Template for CBQ units

Unit	Event driven computer programming 3	
SSC Code	EDP3	
SQA Code	H3A9 04	
SCQF Level	8	
SCQF Credit Value	20	
Guided Learning Hours		
Unit summary		
Learning Outcomes The learner will:	Assessment Criteria	
1. Design event driven programs to address loosely-defined problems	<p>1.1 Identify and structure the components and data required to address problems</p> <p>1.2 Select and use pre-defined components, specialising as required</p> <p>1.3 Identify the set of events that invoke the behaviour of components and other programme elements</p> <p>1.4 Specify the behaviour of components and other program elements to allow efficient implementation, selecting appropriate data types, data and file structures and algorithms</p> <p>1.5 Record the design in an agreed format</p>	
2. Implement a software design using event driven programming	<p>2.1 Use an agreed standard for naming, comments and code layout</p> <p>2.2 Define the screen components required to implement the design by assigning properties and event association (including parameter passing)</p> <p>2.3 Select, declare and initialise variable and data structure types and sizes to meet design requirements</p> <p>2.4 Adapt control structures to implement event (including error) handling to meet the design</p>	

	<p>algorithms</p> <p>2.5 Develop file structures to meet design file storage requirements</p> <p>2.6 Develop input/output routines to implement design requirements</p> <p>2.7 Make effective use of operators and predefined functions</p> <p>2.8 Make effective use of an Integrated Development Environment (IDE) including code and screen templates</p>
3. Develop event driven programs to improve usability	<p>3.1 Seek feedback on the usability of the program</p> <p>3.2 Analyse feedback to identify improvements in usability</p> <p>3.3 Design and implement data validation and error handling techniques which improve the usability of the program</p> <p>3.4 Create on-screen help to assist program users</p>
4. Develop test strategies and apply these to event driven programs	<p>4.1 Develop and apply a test strategy consistent with the design identifying appropriate test data</p> <p>4.2 Apply regression testing consistent with the test strategy</p> <p>4.3 Analyse actual test results to identify discrepancies</p> <p>4.4 Use appropriate tools to estimate the performance of the program</p> <p>4.5 Critically review the program functionality and usability against design requirements</p>
5. Document an event driven computer program	<p>5.1 Create documentation to assist the users of a computer program</p> <p>5.2 Create documentation for the support and maintenance of a computer program</p> <p>5.3 Review program documentation against user and support needs</p>

Additional information about the unit	
Guidance on approaches to assessment	Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum.
Details of the relationship between the unit and relevant National Occupational Standards or other professional standards	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-skills.com/nos
Location of the unit within the subject/sector classification system	IT Professional
Name of the organisation submitting the unit	e-skills UK