

BTEC Extended Diploma in Information Technology

Responsible Team: Computing

| Module Title: | Event Driven Programming | Internal Verifier | J. Terry |
|-----------------------|--------------------------|-------------------|------------------------|
| Module Tutor: | Jessica Warland | Course Code | FCOMPL390/ AY-A/B/C |
| Assignment Title/No: | Assignment 1/4 | Module Code | Unit 14 |
| Submission date/week: | 30/10/17 | Hand out Date | 22/09/17 |

Submission instructions

To be submitted by 11.55pm on Monday 30th October electronically via Cloud using links provided.

Learning Outcomes

Understand the features of event driven programming

Tasks

You have recently been employed by Custom IT solutions, a local company providing IT software solutions to businesses in the area.

As a newly employed junior programmer in the team, Custom IT Solutions has asked you to do some investigative work into Event Driven Programming which will lead to you creating an application for one of their customers.

This assignment will introduce the key concepts of event driven programming and prepare you for implementation of your project.

TASK 1

You have been asked to create a presentation for a trainee programmer who has joined on a work placement. The presentation should include the key features of event driven programming including:

- Definition for event driven programming
- Triggers and Event Handlers
- Event loops
- Flexibility for the programmer
- Suitability for GUI software development
- Ease/Simplicity of Development
- Examples of Visual Programming Languages

(P1)

TASK 2

Event driven programming has an important role in Operating Systems. You have been asked to write a short report to explain to new trainees how an operating system can be seen as an event driven program. Don't forget to show examples of events that occur within an Operating System and also mention about the hardware's role in this including use of IRQ channels

You should include:

- Annotated GUI Desktop image
- Illustrated explanation about how Operating Systems deal with events
- An explanation of how IRQ channels are used to feed the event into the Operating System from the hardware

(M1)

Some operating systems are command line based, such as MS-DOS and UNIX. Evaluate the suitability for event driven programming on these platforms. Include examples of event driven programs that are used within these text-only environments. You can illustrate this with images where suitable.

Include:

- Examples of events that occur in command-line interfaces
- Comparison between CLI and GUI operating systems in terms of the range of events in each and the overall suitability of using event driven applications in a command-line environment

(D1)

Format for submission

Task 1: Presentation on event driven programming

Task 2: Report on event driven aspects of Operating Systems

Suggested Methods

Research using the internet and use your notes, the powerpoint slides and teaching.

Useful Sources

Websites.

• See Cloud for any useful sites

Textbooks

• See Cloud for recommended texts

Magazines and Journals

• You may find trade publications useful. Some vendors may provide materials of use.

Assessment and Grading Criteria

P1 explain the key features of event driven programs

M1 discuss how an operating system can be viewed as an event driven application

D1 evaluate the suitability of event driven programs for non-graphical applications