BRIEF

You have been approached by ‘Omni Consumer Products’ with a view to produce a podcast.

You are encouraged to select a subject matter that promotes one of your interests, but must be related to technology.

The major condition is that you include a segment of no less than 5 seconds promoting the “low, low prices, of Omni Consumer Products – a family company”.

It is important that ‘Omni Consumer Products’ are presented in a positive light – as they will greenlight the final product. Their areas of business include;

Computers

Robotics

Cybernetics

Consumer products

Space exploration

Urban Pacification Tools

Military grade weaponry

Food products

Private government

You will need to include a minimum of three audio layers – and – submit the final mixed file –including compression – in a readily accessible lossless format.

Your podcast will need to be at least 30 seconds in length.

OUTCOME 1

Describe the effect on digital audio of recording, editing and playback techniques.

Performance Criteria

(a) Describe the effects of sampling rates and compression on audio recording

(b) Describe the effect of impedance on audio signals

(c) Describe a range of multi-track recording and editing techniques

♦ at least two different sampling rates in relation to digital audio

♦ identification of the effect of two different types of compression techniques on both files size and audio quality

♦ two examples of impedance and their impact on an audio signal

♦ two examples of multi-track audio techniques from: reverb, equalisation, panning and setting of individual track levels

♦ two examples of how phase can cause problems in multi microphone recording

♦ two examples of how phase can cause problems in multi-track audio file playback

♦ two examples of solutions to phase problems

OUTCOME 2 Identify and plan the acquisition of digital audio for a specified multi-track brief.

Performance Criteria

(a) State the expected quantity, type and quality of digital audio from the brief

(b) State the possible sources of digital audio and any potential copyright issues

(c) Identify the hardware requirements for acquisition of digital audio for the brief

(d) Plan a schedule for digital audio acquisition to meet the requirements of the brief

♦ a multi-track recording, of at least two tracks, lasting at least two minutes and no more than 4 minutes

♦ at least three different audio components

♦ at least two multi-track editing effects

♦ specification of the file formats required for all audio files

OUTCOME 3

Acquire and manipulate sound using multi-track techniques in accordance with a specified multi track brief.

Performance Criteria

(a) Acquire audio files in accordance with the acquisition schedule

(b) Mix a multi-track recording using acquired audio tracks in accordance with the given brief

(c) Manipulate audio tracks using multi-track recording techniques accordance with the given brief

(d) Use appropriate media to store the manipulated multi-track audio file in accordance with the given brief Unit Specification

♦ written and/or recorded evidence which consists of:

— a plan that identifies:

– appropriate expected quality of audio deduced from brief

– possible sources of audio and potential copyright issues

– practical hardware requirements for audio acquisition

– a schedule for audio acquisition within the constraints of the given brief

— an assessor checklist that confirms that the candidate can:

– correctly connect, set up and adjust recording and computer equipment to optimise the audio capture and recording quality for the given brief

– convert captured audio to a suitable file format

– demonstrate that the recording is carried out with proper regard to relevant health and safety regulations

– demonstrate that the completed recording is clearly identified, quality assured for suitable quality and using appropriate file format in accord with the given brief

– demonstrate that copyright law is observed in the acquisition of audio materials and that clearance has been obtained for relevant materials.

– apply at least two appropriate audio effects to the multi track audio file chosen from reverb, equalisation and compression and setting of individual track levels

♦ Product evidence which consists of a portfolio of at least:

— at least three digital audio samples which have been acquired and stored as required by the brief and the plan of activities

— a modified digital audio multi track presented in a manner specified within the brief

— copyright acknowledgement for all digital audio samples within the portfolio

OUTCOME 4

Playback and evaluate a multi-track recording in accordance with a given brief. Performance Criteria

(a) Ensure completeness and quality by playing back the multi-track recording

(b) Evaluate the finished product against the requirements of the brief

(c) Evaluate own performance in planning, acquiring and mixing the multi-track recording