**Assignment Brief – BTEC**

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| **Programme** | | Level 3 Extended Diploma in Creative Media Production (Games Development) | | | |
| **Unit number(s) and title covered** | | Unit 73: Sound for Computer Games | | | |
| **Assignment number & title** | | Assignment Two: Sound Design and Production | | | |
| **Student name** | | *Lewis Hawkins* | | | |
| **Assessor** | | David Matravers | **Internal Verifier** | *James Shaun* | |
| **Date issued** | | *16.01.2019* | **Submission deadline** | *06.02.2019 at* ***4.30pm*** | |
| **Assessment Criteria** | **To achieve the criteria, the evidence must show that the student is able to:** | | | | **Assessor confirm met** |
| **P2** | Describe methods and principles of sound design and production using some subject terminology appropriately | | | |  |
| **M2** | Explain methods and principles of sound design and production with reference to detailed illustrative examples and with generally correct use of subject terminology | | | |  |
| **D2** | Comprehensively explain methods and principles of sound design and production with elucidated examples and consistently using subject terminology correctly | | | |  |

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| **Assessor feedback - 1st submission** | | | | | | | |
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| **Did the learner meet the original deadline or agreed extension?** | | Yes ☐ No ☐ | | | | | |
| **Assessor signature** |  | | | | **Date** | |  |
| **Resubmission authorised?** | | Yes ☐ No ☐ | | | | | |
| **New agreed deadline date for submission** *\* must be within 10 days of receiving original assignment back* | |  | | | | | |
| **Lead Internal Verifier signature** |  | | | **Date** | |  | |
| **Assessor feedback - Resubmission** | | | | | | | |
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| **Assessor signature** (resubmission only) |  | | **Date** | | | |  |

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| **Scenario** | | | | |
| Following on from the article you wrote for “Drowned Sound” on how sound and music is used in games they are now wanting to design and produce sound for their own games but are unsure about how to start.  You need to produce a document comprehensively explaining how they can theoretically go about planning and producing sound. | | | | |
| **Tasks and criteria covered** | | | | |
| **Task 1 – P2, M2, D2**  Within this task you have to comprehensively explain the following topic headings with elucidated examples. Your explanations should be detailed and cover the full range of the below points, your use of examples should be used to support the points you make in order to demonstrate your understanding of Sound design and production   * **Sound design methodology:** *Foley artistry; sound libraries; original development* * **Sound file formats:** *uncompressed, eg wav, aiff, au, smp, voc; lossy compression, eg mp3, ra, vox* * **Audio limitations of game platforms:** *sound processor, eg sound processor unit (SPU), digital sound processor (DSP); random access memory (RAM); storage; software development kit; sample rate; file format; audio output (mono, stereo, surround); direct audio (pulse code modulation (PCM)); adaptive delta pulse code modulation (ADPCM); file size* * **Audio recording systems:** *analogue; digital, eg MiniDisc™, compact disc (CD), digital audiotape (DAT), hard disc; computer audio workstation; multi-track systems; musical instrument digital interface (MIDI); software sequencers; software plug-ins; sound editors; sound modules; midi keyboard instruments* * **Audio sampling:** *file size constraints (resolution, bit-depth); sample rate; mono; stereo; surround*   You should take the time to ensure you cover all the **bold** headings within this task to demonstrate an appropriate range of understanding. Included alongside the bold headings are examples of some of features you may want to include in your document, but you do not have to cover all italicised headings. | | | | |
| **Evidence you must produce for this task** | | | | |
| Fully completed written document with all bold headings covered. | | | | |
| **Sources of information** | | | | |
| **Textbooks**  Baylis P, Freedman A, Procter N et al – BTEC Level 3 National Creative Media Production, Student Book  (Pearson, 2010) ISBN 978-1846906725  Baylis P, Freedman A, Procter N et al – BTEC Level 3 National Creative Media Production, Teaching Resource  Pack (Pearson, 2010) ISBN 978-1846907371  Brandon A – Audio for Games: Planning, Process, and Production (New Riders, 2004) ISBN 978-0735714137  Case A – Sound FX: Unlocking the Creative Potential of Recording Studio Effects (Focal Press, 2007)  ISBN 978-0240520322  Marks A – The Complete Guide to Game Audio: For Composers, Musicians, Sound Designers and Game  Developers, 2nd Edition (Focal Press, 2008) ISBN 978-0240810744  McCuskey M – Game Audio Programming (Course Technology, 2003)  Millward S – Fast Guide to Cubase SX (PC Publishing, 2005) ISBN 978-1870775984  Riley R – Audio Editing with Adobe Audition (PC Publishing, 2008) ISBN 978-1906005030  Sanger G et al – The Fat Man on Game Audio: Tasty Morsels of Sonic Goodness (New Riders, 2003)  ISBN 978-1592730094  **Websites**  www.audiosparx.com – online resource for digital audio  www.filmsound.org/game-audio – game audio articles  www.gamasutra.com – respected website for all things game development  www.gamecareerguide.com/features/696/adaptive\_audio\_a\_beginners\_guide\_.php?page=1 – game audio  article making sounds for video games  www.gamedev.net – a forum, with good articles on all things game development and excellent game  developer resources  www.igda.org – non-profit-making industry body, useful for research and learning support | | | | |
| **Student checklist** | | | | **Complete?** |
| Proofread work | | | |  |
| Reference / Bibliography (if applicable) | | | |  |
| All pages attached and numbered – including introduction/conclusion/front sheet | | | |  |
| **Authenticity of Evidence Student declaration** | | | | |
| I certify that the evidence submitted for this assignment is my own.  I have clearly referenced any sources used in the work.  I understand that false declaration of authenticity (i.e. plagiarised work) is a form of academic misconduct and the relevant College procedures will be instigated if I am found to be in contravention of these. | | | | |
| **Student signature** |  | **Date of submission** |  | |
| **Re-authentication of Evidence Student declaration (for resubmission only)** | | | | |
| **Student signature** |  | **Date of resubmission** |  | |

NB. Students – the assignment starts on the first page **after** these front sheets, i.e. Page 1.

* For your convenience, page numbers have been inserted into the footer. **Please keep them**.
* You may choose to add a contents table (ToC) in this section.
* Please **do** **not use text boxes** for the main body of your written answers.
* Please make sure that images/screenshots are correctly formatted, laid out and labelled. A table of Figures (ToF) may also be added if you wish.
* Make sure you use Page (or Section) Breaks whenever a new page is required. (Rather than adding large numbers of Return/Paragraph characters.) Ensure that new Section breaks continue with correct orientation and correct page numbers.
* Ensure that you have referenced your work throughout, using references in text and that you also have a reference list and full bibliography at the end of the work according to the current **Harvard Referencing** conventions. **Failure to do so will make your work more difficult to authenticate.**

**What is Sound Design Methodology?** This is the creations of sound

**Foley Artistry:** Foley Artistry is the making of sound effects using real world objects (Hitting desk could be knocking on door). This is a useful method of making sound effects as it’s easy and cheap, however it sometimes requires areas to create the sound (as it can get messy), and multiple objects to smash just to get it right.

**Sound libraries:** A sound library is a collection of digital sound recordings. The can be used to download sound effects of a website to use within a project, however some (Free Sounds) are exclusively uploaded by users. This creates a copyright risk that can be hard to avoid without completely ignoring the site.

**Original Development** is where you make the sound effects yourself. This is the best method as all effects belong to you and there’s no worry of copyright.

**Sound File Formats:**

**Uncompressed:** Uncompressed audio is used in sounds that are the most important to the game. In most games the uncompressed audio is used for dialogue, gunfire, and other sounds that are at the forefront of the experience. Examples of uncompressed files are .wav, .aif, .amp, .voc.

**Lossy Compressed:** This type of file that is used in less important sounds such as background music and ambient sound effects. These sounds can be compressed without any concern, since the point of these types of sounds are to not be noticed or stand out.

Examples of compressed audio files are .mp3, .ra, .vox.

* **Audio limitations of game platforms:** *sound processor, eg sound processor unit (SPU), digital sound processor (DSP); random access memory (RAM); storage; software development kit; sample rate; file format; audio output (mono, stereo, surround); direct audio (pulse code modulation (PCM)); adaptive delta pulse code modulation (ADPCM); file size*

**Audio limitations of Game Platforms:**

**Sound Processor:**

Sound Processor Unit (SPU):

**Random Access Memory (RAM):**

**Sample Rate:**

**Audio Output:**

Mono:

Stereo:

Surround: