

IM27 Create Sound Effects For Interactive Media Products

Example job titles: Sound Effects Designer, Audio Engineer

Overview	Knowledge and Understanding	Awareness	Performance Statements
<p>This unit is about your ability to create sound effects that work in an interactive context.</p> <p>This unit is intended to complement the existing Skillset units relating to sound and audio production.</p> <p>Industry standard tools you may use include:</p> <ul style="list-style-type: none"> ▪ Sound forge ▪ WaveLab ▪ Peak ▪ CoolEdit ▪ ProTools ▪ Nuendo 	<p><i>This is what you must know</i></p> <ol style="list-style-type: none"> a. How to interpret and follow specifications or other briefs; b. How, and to whom, to ask questions to clarify requirements or raise issues in response to the specification or brief; c. Principles of sound design, sound effects and acoustics; d. How to locate sources of audio material suitable for meeting the creative brief; e. The types of audio effects that are available and their suitability for different products and contexts; f. Ways in which sound effects can be used to enhance the user’s experience and/or give feedback on user interactions; g. Appropriate file formats for saving sound effects; h. The effect of audio sampling-rates and bit-depth on file-size and data-transfer rates; i. When and why a sound effect might be cut-off prematurely, and how to minimise the risk of this adversely affecting the product; j. The various types of data compression and their relative merits and demerits; k. How to layer sounds to achieve a combined audio effect or to produce a complex replay of elements with logical replay rules; l. The various techniques for synchronising sounds to moving images. m. The concepts of, and practical approaches to, applying environment sounds and creating audio zones within 3D geometry editing tools; n. The recording, editing and post-production of dialogue. 	<p><i>This is what you must be aware of</i></p> <ol style="list-style-type: none"> i. Project parameters and constraints including target platforms and their capabilities, especially relating to audio implementation and playback; ii. Any other audio, such as background music, that the sound effects you create will need to fit with; iii. The events or user interactions that will trigger sound effects in the product; iv. How each sound effect will be used in the product (for example, whether it will play once, loop several times or indefinitely etc.); v. Compatibility issues between mono, stereo, multi-channel and surround sound; vi. The various digital signal processing techniques used to modify and enhance sound clips; vii. The difference between, and implications of, ‘pre-rendered’ sound and live ‘run-time’ sound manipulation; viii. When permission is needed to use material created by others; ix. The limits of what you may legally do with material created by others before permission is needed; x. Any naming conventions, standards, guidelines or specifications that you need to follow; xi. The requirements and expectations of other team members who will use the sound effects you create. 	<p><i>This is what you must be able to do</i></p> <ol style="list-style-type: none"> 1. Generate original sound effects to meet a brief or specification; 2. Systematically assess the implementation of your work in iterative versions and specify changes in effects, volume, pitch and panning 3. Edit existing audio material to create sound effects to meet a brief or specification; 4. Save sound effects in an appropriate format for different target platforms; 5. Organise sound effects using appropriate filing and naming conventions so that they can be located easily by others; 6. Provide clear documentation and audio demonstration clips as necessary for others to incorporate your sound effects into the product; 7. Liaise with colleagues, such as designers and developers, to ensure your sound effects are appropriate and meet requirements; 8. Liaise with the relevant authority to obtain approval for your work.