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| **2.1 The digital audio workstation (DAW)** | | |
| **Hardware components** | | |
| **THE COMPUTER** | * operating system * RAM * hard drives * processor * display |  |
| **COMPUTER PERIPHERALS/HARDWARE:** | | |
| **EXTERNAL STORAGE:** | * Universal Serial Bus (USB) stick * solid state drive (SSD) * cloud storage * network drives |  |
| **DATA INPUT DEVICES:** | * computer keyboard * mouse * trackpad * touchscreen |  |
| **AUDIO OUTPUT:** | * headphones * speakers |  |
| **PORTABLE DEVICES** | * smartphones * tablets |  |
| **MIDI CONTROLLERS:** | * MIDI keyboard * MIDI guitar * MIDI percussion * MIDI wind instruments |  |
| **CONTROL SURFACES:** | * faders * knobs * pads * data wheels * DJ controller |  |
| **AUDIO INTERFACE:** |  |  |
| **LINE INPUT:** | * RCA phono * quarter inch jack * mini jack * stereo quarter inch jack |  |
| **MICROPHONE INPUT:** | * External line return (XLR) * USB * quarter inch jack |  |
| **INSTRUMENT INPUT:** | * direct injection (DI) |  |
| **AUDIO OUTPUT:** | * balanced * unbalanced |  |
| **PHANTOM POWER** |  |  |
| **GAIN CONTROL** |  |  |
| **MIDI INTERFACE:** | * MIDI IN/OUT/THRU * DIN connections * USB connections |  |
| **MIXING DESK:** | * analogue * digital * hybrid * audio inputs * audio outputs * DAW audio interface * DAW control surface |  |
| **Software functions** | | |
| **TYPES OF DAW SOFTWARE:** | * cloud-based * desktop applications |  |
| **CONFIGURATION OF DAW SOFTWARE PROJECTS:** | * opening saved projects * creation of project: * new project * use of templates |  |
| **CONFIGURATION OF DAW** | * audio bit depth settings * sample rate settings |  |
| **BUFFER SIZE SETTINGS:** | * for recording * for mixing * latency |  |
| **CONFIGURATION OF TRACK TYPES** | * audio:   + input selection   + output selection   + stereo tracks   + mono tracks * software instrument:   + instrument selection * MIDI:   + input selection   + output selection |  |
| **SOFTWARE INSTRUMENTS:** | * selecting synthesiser pre-sets * selecting sampler pre-sets * synthesiser editing:   + envelope   + filter   + waveform |  |
| **SAMPLER EDITING:** | * import of audio * mapping * looping |  |
| **LOOPS:** | * audio loops * MIDI loops |  |
| **MIDI EDITING:** | * pitch and rhythm editing grids * cut * copy * paste * quantise: * humanisation * swing * velocity * pitch bend * controller data |  |
| **AUDIO EDITING:** | * trim * copy * paste * reverse * time stretch * pitch manipulation |  |
| **AUTOMATION:** | * volume * pan * instrument parameters * plug-in parameters |  |
| **EFFECTS:** | * time-based effects:   + reverb   + delay |  |
| **MODULATION EFFECTS:** | * chorus * flanging * phasing |  |
| **FILTER EFFECTS:** | * wah-wah |  |
| **DISTORTION EFFECTS:** | * amp simulation * overdrive |  |
| **EQUALIZATION (EQ):** | * low pass filter * high pass filter * frequency selection * Q * gain |  |
| **DYNAMICS PROCESSING:** | * compressor * limiter * gate * threshold * ratio * attack * release * gain |  |
| **EXPORT TO AUDIO FILES:** | * export project and individual parts to stereo audio * selection of bit depth and sample rate * uncompressed stereo audio file types: * waveform audio file (WAV) * audio interchange file (AIF) * compressed stereo audio file types: * MP3 |  |
| **Health and safety** | | |
| **HEALTH AND SAFETY MEASURES** | * identification of hazards: * exposure to noise * use of computer displays and workstations * slip, trip and fall hazards * electrical hazards |  |
| **RISKS ASSOCIATED WITH EACH HAZARD:** | * hearing loss * eye strain * back pain * sprains and breaks * electrocution |  |
| **RISK** | * risk assessment * control measures * reporting of hazards * reporting of accidents |  |