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| **Subject:** Digital Information Technology BTEC Level 1/2Year 10 Curriculum Map 2022-2023 |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
| Half term 1 | **Understand what a User Interface is**Definition of user interface:* software features
* human features
* how software features can be used to facilitate human–device interaction.

**Types of interfaces:** * text based
* speech/natural language
* GUI/WIMPs
* sensors
* menu/forms.

**Range of uses, e.g.:** * computers
* handheld devices
* entertainment systems
* domestic appliances
* controlling devices
* embedded systems.

**Factors affecting the choice of user interface:*** performance/response time
* ease of use
* user requirements
* user experience
* accessibility
* storage space.

**Hardware and software influences:** * operating systems/platforms
* types/size of screen, e.g. touchscreen vs traditional displays
* types of user input, e.g. keyboard, mouse, voice, gestures
* hardware resources available, e.g. processing power, memory
* emerging technologies, e.g. new innovations of input techniques
 | <https://www.google.com/search?q=jobs+in+user+interface&rlz=1C1GCEU_en-GBGB957GB970&oq=josb+in+user+interface&aqs=chrome..69i57j0i13j0i22i30l2j0i390l3.3616j0j4&sourceid=chrome&ie=UTF-8&ibp=htl;jobs&sa=X&ved=2ahUKEwj3kK_-s-n4AhXXPsAKHdsrAnIQutcGKAF6BAhEEAY#fpstate=tldetail&htivrt=jobs&htidocid=nKeSZfvAE_UAAAAAAAAAAA%3D%3D> | Knowledge Organisers:<https://maritime.rivoagency.com/admin/wp-content/uploads/sites/20/2022/10/DIT-Component-3-KO.pdf> |
| Half term 2 | A2 Audience needs Learners will investigate the varying needs of the audience and how they affect both the type and the design of the interface. **• Accessibility needs**:* visual
* hearing
* speech
* motor
* cognitive.

• Skill level: * expert
* regular
* occasional
* novice.

• Demographics: * age
* beliefs/values
* culture
* past experiences.

A3 Design principles Learners will investigate a wide variety of design principles that provides both appropriate and effective user interaction with hardware devices. • Colours: * use of limited range of colours
* use of organisational house style
* ensuring that colours do not clash
* use of textures, e.g. glossy, corporate textures in colours, warm, fabric-style textures.

• Font style/size: * ensuring text style/style is readable
* use of sans serif fonts for screen reading
* avoiding decorative fonts.

• Language: * using appropriate language for user needs, e.g. age-appropriate language
* using language that is appropriate for user skill level.

• Amount of information: * providing appropriate amount of information for the task
* making appropriate use of white space.

• Layout: * consistency throughout the whole interface
* keeping the layout as close as possible to user expectations
* placing important items in prominent positions
* grouping related tasks together
* use of navigational components, e.g. search fields, breadcrumbs, icons
* use of input controls, e.g. dropdown lists, tick boxes, toggles.
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