

## BTEC Assignment Brief

<b>Qualification</b>	<b>Pearson BTEC Level 1/Level 2 Tech Award in Digital Information Technology</b>
<b>Component number and title</b>	<b>1: Exploring User Interface Design Principles and Project Planning Techniques</b>
<b>Learning aim</b>	<b>A: Investigate user interface design for individuals and organisations</b>
<b>Assignment title</b>	<b>The User Interface</b>
<b>Assessor</b>	D. Smith
<b>Issue date</b>	9/9/2019
<b>Hand in deadline</b>	3/10/2019

<b>Vocational Scenario or Context</b>	<p><b>Young Digital Designer of the Year Award</b></p> <p>Your teacher has asked you to take part in the Young Digital Designers competition.</p> <p>The first step is to research two different user interfaces used by individuals and organisations and provide evidence that clearly assesses how:</p> <ul style="list-style-type: none"> <li>• both user interfaces meet the audience's requirements, including their accessibility needs, skills level and demographics</li> <li>• design principles have been used to allow both appropriate and effective user interactions with hardware devices</li> <li>• various techniques have been used to allow different types of users to efficiently interact with the interfaces.</li> </ul>
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<b>Task 1 – Part A</b>	<p><b>The user interfaces</b></p> <p>Select any two types of user interface from the following list for your investigation:</p> <ul style="list-style-type: none"> <li>• text based, such as settings on a mobile phone</li> <li>• GUI/WIMPs as used in operating systems</li> <li>• sensors such as mobile phone thumb print recognition</li> <li>• menus/forms.</li> </ul> <p>Assess how effective the user interface is used on:</p> <ul style="list-style-type: none"> <li>• computers</li> <li>• handheld devices</li> <li>• domestic appliances</li> </ul>
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	<ul style="list-style-type: none"> <li>entertainment systems.</li> </ul> <p>The factors affecting the choice of user interface and how the user interface:</p> <ul style="list-style-type: none"> <li>user requirements</li> <li>ease of use and accessibility</li> <li>performance/response time</li> <li>user experience.</li> </ul> <p>The hardware and software used:</p> <ul style="list-style-type: none"> <li>touch screen vs traditional displays</li> <li>user input such as keyboard, voice, gestures</li> <li>emerging technologies.</li> </ul>
<b>Checklist of evidence required</b>	A report containing detailed annotated screenshots
<b>Task 1 – Part B</b>	<p><b>Design principles</b></p> <p>Assess how the design principles used in each interface meet user requirements such as:</p> <ul style="list-style-type: none"> <li>colours</li> <li>font style/size</li> <li>language</li> <li>amount of information</li> <li>layout</li> <li>retaining user attention</li> <li>combine to create an intuitive design.</li> </ul> <p>Remember to assess the positive and negative effects that each design principle has on the user and their ability to positively interact with the device using detailed relevant examples.</p>
<b>Checklist of evidence required</b>	<ul style="list-style-type: none"> <li>A written document containing annotated screenshots.</li> </ul>
<b>Task 1 – Part C</b>	<p><b>Alternative design</b></p> <p>Assess why an alternative type of user interface would or would not better meet the user needs, with justified examples. You should consider:</p> <ul style="list-style-type: none"> <li>audience accessibility needs</li> <li>user skill level and demographics.</li> </ul> <p>The techniques that can be used to improve both the speed and access to user interfaces.</p>

	<ul style="list-style-type: none"> <li>• use of keyboard shortcuts</li> <li>• informative feedback</li> <li>• easy reversal of actions</li> <li>• placing related objects next to each other to reduce selection time.</li> </ul>
<b>Checklist of evidence required</b>	<ul style="list-style-type: none"> <li>• A written document containing annotated screenshots.</li> </ul>
<b>Criteria covered by this task:</b>	
Criteria reference	To achieve the criteria, you must show that you are able to:
<b>A.2D1</b>	Assess how effectively two different types of user interface meet the design principles and user needs with justified examples.
<b>A.2M1</b>	Analyse how two different types of user interface meet the design principles and user needs with relevant detailed examples.
<b>A.2P1</b>	Explain how two different types of user interface meet design principles with some relevant examples.
<b>A.2P2</b>	Explain how the user interfaces meet user needs with some relevant examples.
<b>A.1M1</b>	Describe the design principles used in two different types of user interface with some examples for each interface.
<b>A.1M2</b>	Describe ways that the user interfaces meet user needs with some examples.
<b>A.1P1</b>	Identify design principles used in two different types of user interfaces with an example for each interface.
<b>A.1P2</b>	Identify ways that the user interfaces meet user needs with one example for each interface.
<b>Sources of information to support you with this Assignment</b>	<p>These websites provide information about user interface design principles:</p> <p><a href="https://www.usability.gov/what-and-why/user-interface-design.html">https://www.usability.gov/what-and-why/user-interface-design.html</a></p> <p><a href="https://en.wikipedia.org/wiki/Principles_of_user_interface_design">https://en.wikipedia.org/wiki/Principles_of_user_interface_design</a></p> <p><a href="http://bokardo.com/principles-of-user-interface-design/">http://bokardo.com/principles-of-user-interface-design/</a></p>
<b>Other assessment materials attached to this Assignment Brief</b>	<i>None.</i>