

**Scheme of Learning: Curriculum area: BTEC Unit 1 Key Stage: 4**

**Unit/Topic Title: Curriculum area: BTEC Unit 1 - Exploring User Interface Design Principles and Project Planning Techniques**

<b>Nº</b>	<b><u>Objectives</u></b>	<b><u>Lesson Content/Outcomes</u></b>	<b><u>Prior learning needed</u></b>	<b><u>Cross curricular</u></b>	<b><u>Assessment</u> ± <u>Resources</u> + <u>Remote Learning</u></b>
1	<ul style="list-style-type: none"> <li>Identify and understand the needs of the unit 1 coursework</li> </ul>	<ul style="list-style-type: none"> <li>Give out green books and folders and Expectations of behaviour and homework which is included in PowerPoint. Each unit give different book</li> <li>Define the four main user interfaces</li> </ul> <p>Go through course requirements and it is a 30% weighting coursework. It will be internally assessed. Go through the assessment criteria of pass, merit and distinction. Go through the resources available for course and the consequences of plagiarism.</p>	Understanding the course requirements.	Similar to doing internally assessed units in other subject's pupils to have understanding off the expectation when completing work.	<p>Pupils need access to following textbook to complete remote learning:</p> <p>Pearson BTEC Tech Award Digital information Technology Student Book.</p> <p><a href="https://woodgreenacademy633.sharepoint.com/sites/ComputingandICTHub/Shared%20Documents/Forms/AllItems.aspx?viewid=b554f539%2D184f%2D4f86">https://woodgreenacademy633.sharepoint.com/sites/ComputingandICTHub/Shared%20Documents/Forms/AllItems.aspx?viewid=b554f539%2D184f%2D4f86</a></p>

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					<a href="https://www.teach-ict.com/gcse_new/computer%20systems/user-interface/">https://www.teach-ict.com/gcse_new/computer%20systems/user-interface/</a>  Please access book from above website (sign in using teams) If still having problems email class teacher
<b>Learning Aim A: Investigate user interface design for individuals and organisations</b> <b>The following lessons will be focused on learning aim A</b>					
<b>2</b>	<ul style="list-style-type: none"><li>Identify the different user interfaces for different operating systems</li><li>Investigate the different</li></ul>	Start the lesson with the starter for 10 Part A  Start the lesson with the starter for 10. ( <b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).  <u>Main</u>	Starter for 10 will be assessed to see pupil’s knowledge of User Interface.	Examples of user interface is used in other subjects	Powerpoint presentation.  Go to website and make notes  <a href="https://www.teach-ict.com/gcse_new/computer%20systems/user-interface/">https://www.teach-ict.com/gcse_new/computer%20systems/user-interface/</a>

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	<p>advantages and disadvantages user interfaces</p>	<p>Pupils need to be able to define what a user interface is and how it is used in the real world.</p> <p>Activity: Create a circle map of the different user interfaces:</p> <p>Pupils will need to identify the advantages and disadvantages of the four interfaces ( GUI, Text base, speech and touch)</p> <p>1. 4 advantages and 4 disadvantages for each interface</p> <p><u>Plenary</u></p> <p>Make a list of what a good User Interface Design should include.</p>			<p><a href="#">interface/miniweb/pg 6.htm</a></p> <p>Read, make notes from following pages from BTEC DIT text book. Pg 4 to 9. Answer questions on pg 9.</p>
3	<ul style="list-style-type: none"> <li>Identify the features of sound in an interface</li> </ul>	<p>The focus of the lesson is how sound features is incorporated within a user interface</p> <p>Pupils discuss their experience using a self-check-out system at a supermarket,(I CAN I WILL: Drive, Risk</p>	<p>Re-cap the lesson about user interface examples</p>	<p>Go through examples of how sound is used in real world interfaces</p>	<p>Powerpoint presentation.</p> <p>Go to following website and make notes on sound interface:</p>

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		<p>Taking, and Initiative).</p> <p>Question they need to answer:</p> <ul style="list-style-type: none"><li>▪ Have you used the self-scan till system in Sainsbury's?</li><li>▪ What do they use? - DISCUSS</li></ul> <p><b>Main</b></p> <p>Pupils will learn about interaction between user and the interface and how customer interacts with the self-checkout.</p> <p>Pupils watch a video on supermarket self-checkout being used by a customer</p> <p><b>Main session activity</b></p> <ul style="list-style-type: none"><li>• Pupils complete a 4 by 4 table to identify the advantages and disadvantages of a self-checkout</li><li>• Worksheet: DRAW THE FRONT SCREEN OF YOUR PHONE SHOWING THE USER INTERFACE (APPS ETC) <b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).<p><b>Homework</b></p></li></ul>			<p><a href="https://www.teach-ict.com/gcse_new/computer%20systems/user_interface/miniweb/pg8.htm">https://www.teach-ict.com/gcse_new/computer%20systems/user_interface/miniweb/pg8.htm</a></p>
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		<ul style="list-style-type: none"> <li>• Research examples of user interfaces around your area, What are the features of the interface</li> <li>• Take pictures if you can.</li> <li>• Examples can be Phone, TV, SMART products, Washing machine etc</li> </ul>			
4	<ul style="list-style-type: none"> <li>• Identify the benefits drawbacks suitability of different user interfaces</li> <li>• Identify why embedded systems are used</li> </ul>	<p>Homework feedback and ideas is discussed in class</p> <p><b>Main</b></p> <ul style="list-style-type: none"> <li>• Watch a video on the history on user interface (12 minute video) Discuss the timeline for the evolution of the user interface</li> <li>• Discuss the features of text and menu interface</li> </ul> <p><b>Activity</b></p> <ul style="list-style-type: none"> <li>• Pupil has 20 second to memorise 7 words, words disappear from the slide and pupils needs to remember and write down the 7 words that were on the board.</li> </ul>	Expanding on user interface learnt at the start of course.	Learning about embedded systems from computer science	<p>Powerpoint presentation.</p> <p>Read, make notes from following pages from BTEC DIT text book. Pg 10 to 11. Answer questions on pg 11.</p>

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		<p>Class discussion of the words that were recalled. (<b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <ul style="list-style-type: none"><li>• In pairs, find 4 examples of Text, Menu/Form, GUI and Sensor user interfaces (4 of each!)</li></ul> <p>For each user interface explain...</p> <ul style="list-style-type: none"><li>-The type of user interface</li><li>-Suitability for the task</li><li>-Benefits and drawbacks of each</li></ul> <p><b>Activity 2:</b></p> <ul style="list-style-type: none"><li>• Complete worksheet: Find Examples of user interfaces and embedded system, research further to find other examples of the user interface (<b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative). Answer the following question on the worksheet of why the examples were chosen.</li></ul>			
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<p>5</p>	<ul style="list-style-type: none"> <li>• To be able to define what a user interface is.</li> <li>• To be able to describe the different user interfaces.</li> <li>• Complete sections 1 and 2 of the brief</li> </ul>	<p>Hand out Brief <b>Unit 1</b> - Exploring User Interface Design Principles and Project Planning Techniques.</p> <ul style="list-style-type: none"> <li>• Teacher introduces assignment brief for Learning aim A and discusses the criteria, explaining the command words used.</li> <li>• Teacher leads a check on understanding of key terminology</li> </ul> <p><b><u>Learning Aim A: Investigate user interface design for individuals and organisations</u></b></p> <p><b>Main session activity 1 and 2:</b> Students complete an assignment in class or for homework. Complete sections:</p> <ol style="list-style-type: none"> <li>1. Define a user interface in your own words.</li> <li>2. Describe and define 4 user interfaces listed below. You will also need to provide an example and image of them:</li> </ol>	<p>Keywords from previous lesson to check understanding</p>		<p>- Unit 1 Part A checklist</p> <p><a href="https://www.teach-ict.com/gcse_new/computer%20systems/user_interface/miniweb/pg6.htm">https://www.teach-ict.com/gcse_new/computer%20systems/user_interface/miniweb/pg6.htm</a></p> <p>Using the notes you have made complete Learning Aim A – Activity 1 and 2. (see left hand side or email class teacher)</p>
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		<ul style="list-style-type: none"> <li>• text based, such as using keyboard to enter commands or instruction, command line.</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><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			
6	To be able to analyse the advantages and disadvantages of different user interfaces	<p>Assignment continued:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> <li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li> </ul> <p><b>Main session activity 3 and 4:</b></p>	Keywords from previous lesson to check understanding		<p>- Unit 1 Part A checklist</p> <p>Using the notes you have made complete Learning Aim A – Activity 3 and 4. (see left hand side or email class teacher)</p>



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		<p>Students complete an assignment in class or for homework.</p> <p>Complete sections:</p> <p>3. You need to assess and explain the advantages and disadvantages of the following 2 interfaces:</p> <ul style="list-style-type: none"><li>• GUI/WIMPs</li><li>• Menus/forms</li></ul> <p>4. Assess how effective the user interface GUI/WIMPs and Menus/forms is used on the following:</p> <ul style="list-style-type: none"><li>• Computers</li><li>• Handheld devices</li><li>• Domestic appliances</li><li>• Entertainment systems.</li></ul> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			
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7	<ul style="list-style-type: none"> <li>Identify the human features and software involved with user interface</li> </ul>	<p><b>Main Activity:</b></p> <ul style="list-style-type: none"> <li>Research Dr Stephen Hawking, Complete a worksheet on Dr Stephen Hawking and the user interface designed to help him cope with daily life.</li> <li>Watch a video on Dr Dr Stephen Hawking and the interface used (2.30 minutes)</li> </ul> <p>Pupils will learn about the software features</p> <p><b>Activity:</b> Complete worksheet about the target audience and user needs for user interface</p> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>	Prior learning about user interface	Learning about examples of accessibility in real life interfaces used in schools	From the textbook. Read about accessibility pg 10 and make notes
8	<ul style="list-style-type: none"> <li>To be able to identify factors affecting interface choices.</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>Which areas should you consider before choosing or designing a user interface?</li> </ul> <p><b>Activity Task:</b></p>	Features with user requirements	Prior learning from start of course	Go to textbook pg 10 and 11. Read through and make notes. Then answer questions

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	<ul style="list-style-type: none"> <li>• To be able to present work in a professional manner.</li> <li>• To be able to respond to feedback appropriately.</li> </ul>	<p>123Laptops is a company that manufactures laptop computers. They have a helpline for customers and receive thousands of calls every day. The company has 100 members of staff and some of them have accessibility needs. <b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <p>In pairs, decide which <b>4 factors</b> you consider to be the most important when choosing the user interface that all staff at 123Laptops will use. <b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <ul style="list-style-type: none"> <li>• Justify <b>why</b> you have chosen each factor.</li> <li>• Describe each factor in your own words. 2/3 lines each</li> <li>• Circle Map: Emerging technologies: What is changing in the world of GUIs?</li> <li>• Task: Complete Worksheet on chosen a user interface, <i>Research task – What are the different types of colour blindness? What colours should you avoid using together?</i></li> </ul>			
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9	<ul style="list-style-type: none"> <li>Explain the factors affecting the choice of user interface</li> </ul>	<p>Assignment continued</p> <p><b><u>Learning Aim A: Investigate user interface design for individuals and organisations</u></b></p> <p>:</p> <ul style="list-style-type: none"> <li>Teacher leads a check on understanding of key terminology.</li> <li>Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li> </ul> <p><b>Main session activity 5:</b> Students complete an assignment in class or for homework.</p>	<p>Keywords from previous lesson to check understanding</p>		<p>Using the notes you have made complete Learning Aim A – Activity 5. (see left hand side or email class teacher)</p>

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		<ul style="list-style-type: none"> <li>For the two chosen user interfaces (GUI/WIMPs and Menus/Forms), explain the factors affecting the choice of user interface, and how the user interface interacts with:             <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> </li> </ul>			
1 0	<ul style="list-style-type: none"> <li>To be able to identify <b>hardware</b> and <b>software</b> used in devices.</li> <li>To be able to use a range of <b>examples</b></li> </ul>	<p><b>Starter:</b> Add examples of hardware and software used in devices used by the student. <b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <p><b>Activity 1:</b></p> <ol style="list-style-type: none"> <li>Explain how touchscreen technology works on the latest GUI interfaces.</li> </ol>	Prior learning of Hardware and software from previous learning	Learning is cross over from core computing	Go to textbook pg 12 and 13. Read through and make notes. Then answer questions on pg 13

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	<p>to support your theory work.</p> <ul style="list-style-type: none"> <li>To be able to present work in a professional manner.</li> </ul>	<p>2. Describe what the user has to do to carry out different tasks using a touchscreen.</p> <p>E.g. Enter text          Passcode          Zoom in/out          View images          Facial recognition</p> <p>How does the user input information?          (Keyboard – voice - gestures)</p> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <p>4. Complete 1-3 again, explaining how these tasks would be completed on a traditional display (laptop).</p> <p>Complete 1-3 again, explaining how emerging (future) technology will work.</p> <p><b>Activity 2:</b>          Touchscreen vs traditional displays</p> <p>1. Explain how touchscreen technology works on the latest menu-driven interfaces.</p>			
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		<p>2. Describe what the user has to do to carry out different tasks using a touchscreen. E.g. Go to a sub-menu Go forwards/backwards</p> <p>3. How does the user input information? (Keyboard – voice - gestures)</p> <p>4. Complete 1-3 again, explaining how these tasks would be completed on a traditional display (laptop).</p> <p>5. Complete 1-3 again, explaining how emerging (future) technology will work.</p> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative)</p> <p><b>Activity Worksheet:</b> Complete worksheet on input/output hardware and storage devices</p>			
1 1	<ul style="list-style-type: none"> <li>Complete brief assignment</li> </ul>	<p>Assignment continued <u>Learning Aim A: Investigate user interface design for individuals and organisations</u></p>			

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		<p>:</p> <ul style="list-style-type: none"><li>• Teacher leads a check on understanding of key terminology.</li><li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li></ul> <p><b>Main session activity 6:</b> Students complete an assignment in class or for homework.</p> <p>The hardware and software used in (GUI/WIMP and Menus/Form) the following (include images)</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>			<p>Using the notes you have made complete Learning Aim A – Activity 6. (see left hand side or email class teacher)</p>
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<p><b>1 2</b></p>	<ul style="list-style-type: none"> <li>To be able to identify different <b>design principles</b>.</li> <li>To be able to <b>judge</b> how the <b>design principles</b> meet user requirements.</li> <li>To be able to select <b>examples</b> to demonstrate design principles.</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>What are the rules (house style) used by WGA?</li> </ul> <p><b>Main content:</b></p> <ul style="list-style-type: none"> <li>Use of colour Watch video on colour wheel, <a href="https://www.youtube.com/watch?v=7npdXnRXfKE">https://www.youtube.com/watch?v=7npdXnRXfKE</a></li> </ul> <p><b>Task:</b></p> <ul style="list-style-type: none"> <li>What are your 'Top 3 tips' when using colour to develop a user interface?</li> </ul> <p>Learning about use of font styles and sizes</p> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>	<p>Prior learning of colours and font from previous learning</p>	<p>Learning is cross over from core computing</p>	<p>Go to textbook pg 18 and 31. Read through and make notes. Then answer questions each of the pages</p>
<p>L13 to L5</p>	<ul style="list-style-type: none"> <li></li> </ul>	<p>Assignment continued</p> <p><b><u>Learning Aim A: Investigate user interface design for individuals and organisations</u></b></p> <p>:</p>	<p>Keywords from previous lesson to check understanding</p>		<p>Using the notes you have made complete Learning Aim A – Part B Design principles.</p>

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		<ul style="list-style-type: none"><li>• Teacher leads a check on understanding of key terminology.</li><li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li></ul> <p><b>Main session activity :</b> Students complete an assignment in class or for homework.</p> <p><b><u>Part B: Design Principles</u></b></p> <p>You will need to assess the design principles of the two different user interfaces you have chosen</p> <p>For the Menu driven interface you can use the following website: <a href="https://dbfront.com/demo2">https://dbfront.com/demo2</a></p>			(see left hand side or email class teacher)
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		<p>For the Graphical User Interface you can use the following examples: iPhone or Samsung phone, iPad.</p> <p>Asses the design principles used and, how the interfaces meet user requirements and interacts with hardware devices for both user interfaces:</p> <p>For each above state and asses:</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>• combined to create an intuitive design ( is it designed for its intended purpose)</li><li>• You should also assess the user's perception of the use of colour, sound and visuals.</li></ul>			
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		<p>Make sure you are using screen prints to justify your explanation for each of the above</p> <p>Remember to also 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>			
L16	<ul style="list-style-type: none"> <li>To be able to identify different user accessibility needs.</li> <li>To be able to research how organisations improve usability.</li> <li>To be able to explain</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>Identify the 4 user accessibility needs using the images shown. (pupils complete worksheet)</li> </ul> <p><b>Activity:</b></p> <ul style="list-style-type: none"> <li>Circular map on accessibility whilst looking at BBC website for research</li> </ul> <p><b>Task:</b></p> <ul style="list-style-type: none"> <li>A local college has set up an online application form to allow</li> </ul>	Prior learning about culture and beliefs relating to technology	Cross circular learning from computer science	Go to textbook pg 14 and 15. Read through and make notes. Then answer questions on pg 15.

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	<p>how user skills differ.</p>	<p>students to sign up to new courses.</p> <ul style="list-style-type: none"><li>• Describe how the user interface can be adapted for users with visual, Hearing and speech accessibility needs.</li></ul> <p><b>User skill Task:</b></p> <ul style="list-style-type: none"><li>• In pairs, decide which type of user they are describing (looking at different job description and match to the user skills)</li></ul> <p>Learning about Demographics, Past experiences, Culture and beliefs, Keyboard shortcuts</p> <p><b>Task:</b></p> <ul style="list-style-type: none"><li>• Pupils explain how a user's past experiences may affect how easily they recognise these icons.</li><li>• Pupils complete a table to research into the <b>keyboard shortcuts</b> for a Windows PC or Apple Mac computer.</li></ul>			
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		<p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p> <p><b>Extension:</b></p> <ul style="list-style-type: none"> <li>• Read p.30-31 of the 'Student book':</li> </ul>			
L17L18	<ul style="list-style-type: none"> <li>• Continue and complete assignment</li> </ul>	<p>Assignment continued</p> <p><b><u>Learning Aim A: Investigate user interface design for individuals and organisations</u></b></p> <p>:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> <li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li> </ul> <p><b>Main session activity :</b></p>	Keywords from previous lesson to check understanding		Using the notes you have made complete Learning Aim A – Part C Investigate user interface design for individuals and organisations. (see left hand side or email class teacher)

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		<p>Students complete an assignment in class or for homework.</p> <p>Assess why an alternative type of user interface (Text base, sensors) would or would not better meet the user needs, with justified examples. Consider this against GUI/WIMP and Menu/Form.</p> <p>You should consider:</p> <ul style="list-style-type: none"><li>• Audience (who is the audience) accessibility needs (is there any needs the audience have)</li><li>• user skill level (Novice, regular, occasional and expert) and demographics (Age, past experience, culture and beliefs).</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></ul>			
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		<ul style="list-style-type: none"> <li>placing related objects next to each other to reduce selection time.</li> </ul>			
<b><u>Part B: Use project planning techniques to plan and design a user interface</u></b>					
<b>L19</b>	<ul style="list-style-type: none"> <li>To be able to <b>develop</b> objectives for your project.</li> <li>To be able to <b>apply</b> project management techniques</li> <li>To be able to <b>research</b> different parts of the</li> </ul>	<p>Start the lesson with the starter for 10 Part B</p> <p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>Choose a club, such as a sports club that you are familiar with, and describe the aims of the club. How these aims are achieved by the activities that you could get involved with at the club?</li> </ul> <p><b>Task:</b></p> <ul style="list-style-type: none"> <li>User requirements: State how you will design the following to meet the requirements of the overall interface:  House style</li> </ul>	Prior leaning about house styles	Cross circular leaning from core computing	Go to textbook pg 40 to 45. Read through and make notes. Then answer questions on each activity.



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	assignment	<p>Colours Font Logos/icons</p> <ul style="list-style-type: none"><li>• Audience requirements: Breakdown the requirements of the interface on the 4 target audiences:</li><li>• Students</li><li>• Staff</li><li>• Parents</li><li>• Visitors</li></ul> <p>Learning about aims and objectives</p> <p><b>Task:</b></p> <ul style="list-style-type: none"><li>• Write three SMART objectives for the Jones United FC project brief</li><li>• Write down the purpose of the Jones United FC information system. Why is it being created?</li><li>• 40% of Jones United FC customers are aged 16-30.</li><li>• Discuss what you would need to consider about this age range</li></ul>			
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		<p>when designing the user interface. (complete worksheet)</p> <p>Plenary</p> <p>Why is it so important to consider the audience and purpose of a project before starting?</p> <p><b>Homework:</b> Complete worksheet on different planning tools</p> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			
L20 L23	<ul style="list-style-type: none"> <li>Complete the assignment part B</li> </ul>	<p><b><u>Part B: Use project planning techniques to plan and design a user interface</u></b></p> <p>:</p> <ul style="list-style-type: none"> <li>Teacher leads a check on understanding of key terminology.</li> <li>Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher</li> </ul>	<p>Keywords from previous lesson to check understanding</p>		<p>Using the notes you have made complete Learning Aim B – Part A. (see left hand side or email class teacher). You are creating a virtual tour for Wood Green Academy students.</p>

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		<p>suggests students make notes to plan their response.</p> <p><b>Main session activity :</b> Students complete an assignment in class or for homework.</p> <p>1. Project requirements:</p> <ul style="list-style-type: none"><li>• the purpose of the user interface – 10 lines</li><li>• the user requirements: <i>'User requirements are what the client wants the system to do or contain, the items they want on the screen and where they want them to be placed, what tasks the user should be able to complete'</i> – 20 lines</li><li>• the audience requirements: - 20 lines<ul style="list-style-type: none"><li>○ house style,</li><li>○ use of colour</li><li>○ font type,</li><li>○ size</li></ul></li></ul>			
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		<ul style="list-style-type: none"> <li>• user accessibility requirements (accessibility tools, examples are on BBC website) – (20 lines) voice over, alt tool, descriptive (tool tip), bbc other tools</li> <li>• Create a minimum of five SMART aims/objectives for the project.</li> <li>• Input and output requirements. – 15 lines</li> <li>• Hardware and software requirements.</li> </ul>			
L 2 4	<ul style="list-style-type: none"> <li>• <b>Understand</b> what a PERT chart is.</li> <li>• <b>Understand</b> what a project</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>• Research one IT project that has failed. Share your findings with the class. Use the worksheet to complete. (complete worksheet)</li> </ul> <p><b>Activity Task 1:</b></p>			<p>Go through pages 36 and 37 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and answer questions on pg 37</p>

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	<p>methodology is.</p> <ul style="list-style-type: none"><li>• <b>Explain</b> the benefits and drawbacks of using each methodology</li></ul>	<ul style="list-style-type: none"><li>• Use the provided worksheet to make notes on project methodologies which you will need to support you with your assignment. Go through pages 36 and 37 of Pearson BTEC Tech Award Digital information Technology Student Book.</li></ul> <p><b>Learning:</b></p> <ul style="list-style-type: none"><li>• pupils will learn about Waterfall Methodology, Iterative methodology, Agile Approach</li></ul> <p><b>Activity Task 2:</b></p> <ul style="list-style-type: none"><li>• Pupil continue complete worksheet: Discuss reasons why the waterfall and iterative methodology would be used.</li><li>• Research the benefits and drawbacks of using each methodology.</li></ul> <p><b>Activity Task 3:</b></p> <ul style="list-style-type: none"><li>• Pupil continue complete worksheet. Jones Marketing is a company that designs and develops apps for celebrities. Discuss why Jones Marketing</li></ul>			
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		<p>would make use of an agile methodology when creating their apps, rather than a waterfall methodology.</p> <p>Learning about Pert chart</p> <p><b>Activity Task 4:</b></p> <ul style="list-style-type: none"> <li>• Pupil continue complete worksheet. Use the table to create a PERT chart.</li> <li>• Benefits and drawbacks of a PERT chart</li> </ul> <p><b>Plenary:</b></p> <ul style="list-style-type: none"> <li>• Explain the common reasons why a project can fail.</li> </ul> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			<p>Go through pages 38 and 39 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and answer questions on pg 39</p>
L25 L27	<ul style="list-style-type: none"> <li>• Continue to complete assignment B</li> </ul>	<p>Assignment continued:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> </ul>	<p>Keywords from previous lesson to check understanding</p>		<p>Go through pages 46 and 47 of Pearson BTEC Tech Award Digital information</p>

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		<ul style="list-style-type: none"><li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li></ul> <p><b>Main session activity :</b> Students complete an assignment in class or for homework.</p> <ul style="list-style-type: none"><li>• Create a task list for all the tasks you will complete from the design stage, implementation stage and evaluation stage. E.g. system life cycle.</li><li>• What methodology are you going to use in the project and justify your reasons why this is the most appropriate. (Waterfall and agile).</li><li>• Create a PERT chart diagram, this should include data for how long each task will take within lesson and also deadlines for each task.</li></ul>			Technology Student Book. Make notes and answer questions on pg 47
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L28	<ul style="list-style-type: none"> <li>• <b>Understand</b> what a Gantt chart and critical path diagram is.</li> <li>• <b>Create</b> a mood board</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>• Think of a project you have completed in your school or a club you attend.</li> <li>• What methods, if any, did you use to plan when each task was going to be completed?</li> <li>• Did you stick to it?</li> <li>• How useful was your plan?</li> </ul> <p><b>Activity Task 1:</b> complete question on worksheet</p> <p><b>Activity Task 2:</b> Using table to complete a Gantt chart and Critical path diagram on worksheet</p> <p><b>Activity Task 3:</b> Produce a written description of the <b>user requirements</b> given in the Jones United FC project brief.</p> <p>a) Discuss the benefits and drawbacks of using graphical</p>	Prior learning about project management	Cross learning with art and English	Research what a mood board is and create a moodboard for the school



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		<p>and written descriptions for this project.</p> <p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>• What is a 'mood board'?</li> <li>• State the target audience for your 'Touchscreen information system' at WGA.</li> </ul> <p><b>Content:</b> Learn about Mood board and the content needed. Learn about drawings and annotation of drawings</p> <p><b>Plenary:</b></p> <ul style="list-style-type: none"> <li>• Research an example of a mood board on the internet. What feeling do you think the mood board creates?</li> </ul> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			
L29 L30	<ul style="list-style-type: none"> <li>• Continue to complete assignment B</li> </ul>	<p>Assignment continued:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> <li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher</li> </ul>	<p>Keywords from previous lesson to check understanding</p>		<p>Go through pages 50 to 52 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and complete activities</p>

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		<p>suggests students make notes to plan their response.</p> <p><b>Main session activity :</b> Students complete an assignment in class or for homework.</p> <ul style="list-style-type: none"> <li>• Create a mood board of ideas for the project scenario. Include the following sections: content, accessibility, aims/objectives, sound, design, colour and controls.</li> <li>• Create a Gantt chart on Microsoft Project</li> <li>• Design: Sketches / storyboard / annotations</li> </ul>			<p><b>Task:</b> Design: Create Sketches /storyboards for your virtual tour.</p>
L 3 1	<ul style="list-style-type: none"> <li>• <b>Define</b> the terms 'constraint' and 'risk'.</li> <li>• <b>Understand</b> the difference between</li> </ul>	<p><b>Starter:</b></p> <ul style="list-style-type: none"> <li>• Think about the way you travel to school in the morning. Make a list of the possible things that could happen to influence the amount of time it takes you to travel there.</li> </ul> <p><b>Activity Task 1:</b></p>	Prior learning about project requirements	Project and time organizing	Go through pages 46 and 47 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and answer questions on pg 47

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	<p>constraint and risk.</p> <ul style="list-style-type: none"><li>•</li></ul>	<ul style="list-style-type: none"><li>• Make notes on the following sections in your exercise books:</li><li>• Constraints.</li><li>• Times.</li><li>• Resources.</li><li>• Task dependencies.</li><li>• Security.</li></ul> <p>Go through pages 46 and 47 of Pearson BTEC Tech Award Digital information Technology Student Book.</p> <p><b>Activity Task 2:</b></p> <ul style="list-style-type: none"><li>• Discuss what project constraints there are in your school. You should include: time, resources, task dependencies and security.</li></ul> <p><b>Activity Task 3:</b></p> <ul style="list-style-type: none"><li>• Make notes on the following sections in your exercise books:</li><li>• Potential risks.</li><li>• Contingency planning.</li><li>• Timescales.</li><li>• Milestones.</li><li>• Resources.</li></ul>			<p>Go through pages 48 and 49 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and answer questions on pg 49</p>
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		<p>Go through pages 48 and 49 of Pearson BTEC Tech Award Digital information Technology Student Book.</p> <p><b>Activity Task 4:</b></p> <p>Produce a suitable diagram such as a Gantt chart or PERT chart that shows how you would spend your time in this Jones United FC project. Remember the project must be completed in six weeks. Make sure your diagram includes:</p> <ul style="list-style-type: none"><li>• The overall timescale of when you would start and end the project.</li><li>• When tasks and subtasks will be completed.</li><li>• Key milestones, including when reviews with the client will be carried out.</li><li>• When resources will be needed.</li></ul> <p><b>Content:</b></p> <p>Learning about project constraints and sketch drawings evaluation</p> <p>Learning about Mind map (node diagram)</p> <p>Complete worksheet</p> <p><b>Homework:</b></p> <ol style="list-style-type: none"><li>1. What is a constraint?</li></ol>			
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		<ol style="list-style-type: none"> <li>2. How can knowledge of constraints help to develop a contingency plan?</li> <li>3. What should be considered when planning the timescales in a project?</li> <li>4. Explain why it is important to plan key milestones and reviews into projects.</li> </ol> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			
L32L33	<ul style="list-style-type: none"> <li>• Continue to complete assignment B</li> </ul>	<p>Assignment continued:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> <li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li> </ul> <p><b>Main session activity :</b> Students complete an assignment in class or for homework.</p>	Keywords from previous lesson to check understanding		<p>Brief in this folder</p> <p>Using the notes you have made complete Learning Aim B – Part B. (see left hand side or email class teacher). You are creating a virtual tour for Wood Green Academy students.</p>

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		<ul style="list-style-type: none"> <li>• Determine the project constraints and potential risks</li> <li>• Create a contingency plan, determine all the things that can go wrong in the project and what have you done to prevent these,</li> <li>• Storyboard justification</li> </ul>			
L34 L37	<ul style="list-style-type: none"> <li>• Create and implement the designs for the user interface</li> </ul>	Create the interface via powerpoint, this must include all the designs on paper and must include colour, video, animation and interaction	Previous skills from the start of the course		Create the interface via powerpoint, this must include all the designs on paper and must include colour, video, animation and interaction
<b>P a r t C : D e v e l o p a n d r e v i e w a u s e r i n t e r f a c e</b>					
L38	<ul style="list-style-type: none"> <li>• <b>Create</b> a test table to test your interface to see if it has</li> </ul>	<b>Starter:</b> <ul style="list-style-type: none"> <li>• Circular map why is testing important</li> </ul> <b>Content:</b>	Previous skills from implementation and designs	Cross circular from previous lesson	Go through pages 54 and 55 of Pearson BTEC Tech Award Digital information Technology Student

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	<p>achieved the requirements</p> <ul style="list-style-type: none"> <li>• <b>Create</b> a questionnaire to gain analysis from peers about your final product.</li> </ul>	<ul style="list-style-type: none"> <li>• How to set up a test table with headings</li> <li>• How to create the questionnaire feedback</li> <li>• Evaluation set with strengths and weakness required</li> </ul> <p><b>I CAN I WILL:</b> Drive, Risk Taking, and Initiative).</p>			<p>Book. Make notes and answer questions on pg 55</p>
L39 L45	<ul style="list-style-type: none"> <li>• Continue to complete assignment C</li> </ul>	<p>Assignment continued:</p> <ul style="list-style-type: none"> <li>• Teacher leads a check on understanding of key terminology.</li> <li>• Teacher reminds students that the assignment is formal and must be their own work. Once it has been submitted it cannot be revised or modified. The teacher suggests students make notes to plan their response.</li> </ul> <p><b>Main session activity :</b></p>	<p>Keywords from previous lesson to check understanding</p>		<p>Go through pages 58 to 67 of Pearson BTEC Tech Award Digital information Technology Student Book. Make notes and complete activities on each page.</p>

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		<p>Students complete an assignment in class or for homework.</p> <ul style="list-style-type: none"><li>• Create a test table for the interface to test all aspects of the user interface</li><li>• Create and fill in questionnaire feedback to be completed by three pupils</li><li>• Evaluation strengths and weakness</li></ul>			
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