**BTEC Assignment Brief**

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| **Qualification** | | Pearson BTEC Level 3 National Foundation Diploma in Information Technology |
| **Unit number and title** | | **Unit 8: Computer Games Development** |
| **Learning aim(s)** (For NQF only) | | **B:** Design a computer game to meet client requirements  **C:** Develop a computer game to meet client requirements |
| **Assignment title** | | Computer Gaming Technologies |
| **Assessor** | |  |
| **Issue date** | |  |
| **Hand in deadline** | |  |
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| **Vocational Scenario or Context** | | You have a job as a trainee programmer at a software developer who creates computer games.  You have been asked to write a computer game that will appeal to children aged around 8-12.The game involves navigating a character around an area collecting items and avoiding hazards. Collecting items adds to your score, colliding with hazards uses up lives, of which each game character only has a limited number. For example the player could direct a mouse around a house collecting pieces of cheese, but the mouse needs to avoid cats (hazards) which occupy the house. The game should be timed, with player performance based on the score achieved over a certain time. It should also have levels of difficulty with more difficult levels having more hazards, fewer lives or a shorter time. The game should be exciting and fun to play, as well as visually appealing. |
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| **Task 1** | | You are going to design, optimise and evaluate your game.  In your design, development, testing and review of the game, you need to:   * Create a design for the game, including user requirements, visual designs, test plans and technical documentation. * Review the design with at least two other people and use their feedback to create an improved version of the design * Provide a written justification of the design decisions you made when developing the design for the game and show how the design will fulfil its purpose and meet the user requirements outlined in the scenario * Develop the game, following your design, and test it using a number of methods including test plans and user testing to ensure it is fully functional, stable and has suitable performance and usability * Optimise the game, using feedback obtained from user testing to create an improved version * Evaluate the design, creation and optimisation of the game considering its effectiveness in meeting the stated requirements. Your evaluation should be supported by evidence from all stages of the process and draw conclusions as to how the chosen techniques and processes produced a game that better meets the requirements compared to the alternatives   Present evidence that you have shown individual responsibility, effective time-management in your design and development of a computer game, making high-quality justified recommendations and decisions. For example, you need to show how you have:  • Planned and managed your time and met targets.  • Reviewed and responded to outcomes including the use of feedback from others  • Behaved appropriately while completing the assignment – including professionalism, etiquette, supportive of others, timely and appropriate leadership, accountability and individual responsibility  • Evaluated outcomes to help inform high-quality justified recommendations and decisions   * Used appropriate methods of communication effectively |
| **Checklist of evidence required** | | * Design documentation * Feedback on the design collected from others * Improved version of the design * Written justification of design decisions * Completed game, including code listing and screen shots of the game working * Test documentation and user feedback * Analysis of feedback and evidence of optimisation of the game to produce and updated version * Evaluation of the design, development and optimisation process. |
| **Criteria covered by this task:** | | |
| Unit/Criteria reference | To achieve the criteria you must show that you are able to: | |
| 8/BC.D2 | Evaluate the design and optimised computer game against client requirements. | |
| 8/BC.D3 | Demonstrate individual responsibility, creativity and effective self-management in the design, development and review of a computer game. | |
| 8/B.M2 | Justify decisions made, showing how the design will fulfil its purpose and client requirements. | |
| 8/C.M3 | Optimise a computer game to meet client requirements. | |
| 8/B.P3 | Produce designs for a computer game that meet client requirements. | |
| 8/B.P4 | Review the designs with others to identify and inform refinements. | |
| 8/C.P5 | Produce a computer game to meet client requirements. | |
| 8/C.P6 | Test a computer game for functionality, usability, stability and performance. | |
| 8/C.P7 | Review the extent to which the computer game meets client requirements | |
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| **Sources of information to support you with this Assignment** | | <http://www.bbc.co.uk/news/technology> - BBC New website, technology section  Games magazine, and other computer gaming magazines. |
| **Other assessment materials attached to this Assignment Brief** | | *eg, work sheets, risk assessments, case study* |