Unit 22: Application Development

Assignment 2 Brief

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| **Programme Title** | **Pearson BTEC Level 5 Higher National Diploma in Computing** |
| Student Name/ID Number |  |
| Unit Number and Title | Unit 22: Application Development |
| Academic Year |  |
| Unit Tutor |  |
| Assignment Title | Evaluate the performance of a business application against its software design document after plan and produce a functional business application |
| Issue Date |  |
| Submission Date |  |
| Submission Format | |
| *Format:*   * This assignment is group report. * **A report that includes Activity 1 and Activity 3.** * **A software package specified in Activity 2.** * **A presentation specified in Activity 2.** * You must use font *Calibri size 12, set number of the pages and use multiple line spacing at 1.5. Margins must be: left: 1.25 cm; right: 1 cm; top: 1 cm and bottom: 1 cm.* * You should use in text references and a list of all cited sources at the end of the essay by applying Harvard referencing style. * The recommended word limit is *2000-2500 words (+/-10%)*, excluding the tables, graphs, diagrams, appendixes and references. You will not be penalized for exceeding the total word limit. * The cover page of the report has to be the Assignment front sheet 2 (to be attached with this assignment brief).   *Submission:*   * Students are compulsory to submit the assignment in due date and in a way requested by the Tutor. * The form of submission will be a soft copy posted on <http://cms.btec.edu.vn/>. * Remember to convert the Word file into PDF file before the submission on CMS. Students are advised to use latex to write the assignment.   *Note:*   * The individual Assignment *must* be your own work, and not copied by or from another student or from anywhere. * If you use ideas, quotes or data (such as diagrams) from books, journals or other sources, you must reference your sources, using the Harvard style.   Make sure that you understand and follow the guidelines to avoid plagiarism. Failure to comply this requirement will result in a failed assignment. | |
| Unit Learning Outcomes | |
| LO3 Plan and produce a functional business application with support documentation.  LO4 Evaluate the performance of a business application against its software design document and initial requirements | |
| Transferable skills and competencies developed | |
| Computing-related cognitive skills   * Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to computing and computer applications * Use such knowledge and understanding in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs * Recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solutions * Analyse the extent to which a computer-based system meets the criteria defined for its current use and future development * Deploy appropriate theory, practices and tools for the design, implementation and evaluation of computer-based systems.   Computing-related practical skills   * The ability to evaluate systems in terms of quality attributes and possible trade-offs presented within the given problem * The ability to plan and manage projects to deliver computing systems within constraints of requirements, timescale and budget * The ability to recognise any risks and safety aspects that may be involved in the deployment of computing systems within a given context * The ability to deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems * The ability to critically evaluate and analyse complex problems, including those with incomplete information, and devise appropriate solutions, within the constraints of a budget.   Generic skills for employability   * Intellectual skills: critical thinking; making a case; numeracy and literacy * Self-management: self-awareness and reflection; goal setting and action planning, independence and adaptability; acting on initiative; innovation and creativity * Contextual awareness, e.g. the ability to understand and meet the needs of individuals, business and the community, and to understand how workplaces and organisations are governed. | |
| **Vocational scenario** | |
| Continue with the scenario stated in the first assignment. | |
| Assignment activity and guidance | |
| **Activity 1**  Conduct a peer review of the user requirements and proposed solution to refine your proposed solution.   * Create a survey and record its responses about user requirements and the proposed solution. Remember to provide the information of the survey's participants, such as their names and job descriptions. * Interpret the survey results to identify weaknesses of the proposed solution.   (Approximately 500 words)  **Activity 2**  BudgetWise Solutions now develops a functional business application using the preferred tools, techniques, and methodologies.   * **Develop** the app using the preferred tools and previous design. * Create a **presentation** to review how your team developed the app. Your team also need to answer questions relating to what and how the project has completed. * Your team performance will be based on how much the user requirements have been implemented and their quality.   (A presentation about 25 pages for the presentation)  **Activity 3**  Evaluation of the suitability of your team solution in relation to the needs of BudgetWise Solutions, to include:   * a critical review of undertaking a systems investigation which led to the design, development and testing of the solution and how it ensured improved reliability and effectiveness of the solution, including consideration of how risks were addressed * An justification of how feedback was acted on to improve the solution, including justification of actions taken and any feedback that was not acted on * Recommendations for future improvements to the solution, including a supported rationale for these suggested improvements.   Although it is a group assignment, each member must do this task individually to show what you have learned in this project.  (Approximately 1000 words) | |
| **Recommended Resources**  **Please note that the resources listed are examples for you to use as a starting point in your research –** **the list is not definitive.** | |

**Learning Outcomes and Assessment Criteria**

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| Pass | Merit | Distinction |
| **LO3** Plan and produce a functional business application with support documentation | |  |
| **P4** Conduct a peer review of the problem definition statement, proposed solution and development strategy, documenting any feedback given.  **P5** Develop a functional business application with support documentation based on a specified business problem. | **M3** Interpret peer-review feedback and identify opportunities not previously considered.  **M4** Develop a functional business application based on a specific software design document, with supportive evidence of using the preferred tools, techniques and methodologies. | **LO3 & LO4**  D2 Justify improvements to the business application system made because of feedback and also feedback which was not acted upon, including opportunities for improvement and further development. |
| **LO4** Evaluate the performance of a business application against its software design document and initial requirements. | |
| **P6** Review the performance of the business application against the problem definition statement and initial requirements. | **M5** Critically review the design, development and testing stages of the application development process including risks. |