# Assignment Brief 2 (RQF)

## Higher National Certificate/Diploma in Computing

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| **Student Name/ID Number:** |  |
| **Unit Number and Title:** | **Unit 04: Database Design & Development** |
| **Academic Year:** | **2022** |
| **Unit Assessor:** | **Tran Trong Minh** |
| **Assignment Title:** | **Database implementation and Testing** |
| **Issue Date:** | **18 Jan. 22** |
| **Submission Date:** |  |
| **Internal Verifier Name:** |  |
| **Date:** |  |

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| **Submission Format:** |
| *Format:*   * This assignment is an Individual assignment and specifically including 2 documents:   1. *sql file of your code and represent your code to your tutor*   2. *a report document* * You must use font Calibri size 12, set number of the pages and use multiple line spacing at 1.3. Margins must be: left: 1.25 cm; right: 1 cm; top: 1 cm and bottom: 1 cm. The reference follows Harvard referencing system. The recommended word limit is 2.000-2.500 words. 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.   *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.greenwich.edu.vn/>. * Remember to convert the word file into PDF file before the submission on CMS.   *Note:*   * The individual Assignment *must* be your own work, and not copied by or from another student. * 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:** |
| **LO2** Developa fully functional relational database system, based on an existing system design.  **LO3** Test the system against user and system requirements.  **LO4** Produce technical and user documentation |
| **Assignment Brief and Guidance:** |
| **Assignment scenario**  You are employed as a Database Developer for a large IT consultancy company. The company has been approached by **FPT Shop** which is expanding due to the growth of the number of stores. **FPT Shop** is currently facing difficulties in dealing with managing the database from all shops on over country. It decided to develop a new database so that: **users can register with their phone numbers as IDs and order or rate, comment for their bought devices, shop managers can take care for their stores and director board can view all data from all shops.**  You are tasked to select one of those systems to develop database for FPT Shop. Your tasks are to:   * Work with FPT Shop to find out about current requirements for each system * Analyse the requirements and produce clear statements of user and system requirements. * Design a relational database system using appropriate design tools and techniques * Develop a fully functional relational database system, based on an existing system design. * Test the system against user and system requirements. * Produce technical and user documentation   **Part 2 (Assignment 2)**  Once the designs have been accepted by your manager you have been asked to:  Develop the database system using evidence of user interface, output and data validations and querying across multiple tables.  You want to include more than just the basics so you will implement a fully functional database system which will include system security and database maintenance features.  You have decided to implement a query language into the relational database system. The developed system will be demonstrated to your manager.  Your manager has asked you to include in the report:   1. Assessing whether meaningful data has been extracted through the use of query tools to produce appropriate management information. 2. Evaluating the effectiveness of the database solution in relation to user and system requirements, and suggest improvements. 3. Once the system has been developed, you will test the system and your manager will complete a witness statement indicating how your tests are performing against user and system requirements. 4. You will produce a brief report assessing the effectiveness of the testing, including an explanation of the choice of test data used. 5. Lastly you will produce technical and user documentation which will be given to the company.   You want to provide some graphical representations for ease of reference in the technical guide, so you have decided to produce a technical and user documentation for a fully functional system, including diagrams showing movement of data through the system, and flowcharts describing how the system works. |

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| Learning Outcome | Pass | Merit | Distinction |
| LO2 | **P2** Develop the database system with evidence of user interface, output and data validations, and querying across multiple tables.  **P3** Implement a query language into the relational database system. | **M2** Implement a fully functional database system which includes system security and database maintenance.  **M3** Assess whether meaningful data has been extracted through the use of query tools to produce appropriate management information. | **D2** Evaluate the effectiveness of the database solution in relation to user and system requirements, and suggest improvements. |
| LO3 | **P4** Test the system against user and system requirements. | **M4** Assess the effectiveness of the testing, including an explanation of the choice of test data used. |
| LO4 | **P5** Produce technical and user documentation. | **M5** Produce technical and user documentation for a fully functional system, including ER Diagram and normalization statements and describing how the system works. | **D3** Assess any future improvements that may be required to ensure the continued effectiveness of the database system. |