Coursework tasks

Part A [50%]

In Part A of this assignment you must adopt the role of a Business Analyst and write a report for the company chairmen in the case study in Appendix A. The brief for this this part of the assignment is as follows:

Memo from the company chairman

We need advice on suitable database infrastructure to support the planned needs of our system and the future growth of our company. Using your knowledge of DBMS technology and examining the requirements of the system (see Appendix A) please provide:

- 1) An Entity-Relationship diagram of the data requirements of our company
- 2) A report (around 2,000 words) on the best available **DBMS to meet our needs**. Your report should focus on the following key points for our business: security, the ability to use a variety of languages and currencies, value for money and speed of transaction processing. Please keep the report short and make sure that all technical terms are explained (no jargon). We are expecting an unbiased report that examines all valid options for a new DBMS and makes clear recommendations.

Deliverables for part A

On or before the deadline you must submit a single document through the Turnitin system on Student Central (you will be given instruction in class on where to find this and how to use it). The document will contain your word-processed report with the ER diagram (designed using a suitable CASE tool). Your student number should be in the header of the report.

Part B [50%]

In Part B of this assignment you must adopt the role of a Business Intelligence Analyst and write a report for the business managers in the case study in Appendix A. The brief for this report is as follows:

With the move to the latest DBMS technology we want to make the most of the data we collect to gain business advantage. Using your knowledge of Business Intelligence and data mining, write a report on the potential applied to our company. Your report should focus on these key points:

- a) The design of a new data warehouse that could be used for OLAP applications
- b) A discussion of the potential for using data mining algorithms to discover information about our existing and potential customers

Please keep the report short (around 2,000 words). The report is addressed to the technical director, so technical terms can be used but the report must still be clearly expressed. We are also expecting an unbiased report that examines all valid options but makes clear recommendation.

Deliverables for part B

On or before the deadline you must submit a single document through the Turnitin system on Student Central. The document must contain your word-processed report with your student number in the header of the report. The report must also contain the following diagrams, drawn using a CASE tool and copied into the report: a star schema for a new data warehouse.

END OF TASKS