Southern New Hampshire University

IT 204 Milestone Four Guidelines and Rubric

Milestone Four provides you with the opportunity to work with your group members on finding and recording specifications for a Database Management System (DBMS) assigned by your instructor. You may recommend this DBMS in your final project if you believe it fits the business case and will fully address the needs of Birchwood Lane Schools. You also may select another DBMS for the final project if you believe it better addresses the business case. As you will see, with the help of your group members and classmates, you will have access to specifications for several different DBMSs by the end of this milestone.

Prompt:

1. First, note which DBMS you have been assigned to research by your instructor. This will be in the Group Discussion forum.
2. Next, using the Group Discussion forum, gather and discuss the specifications (A–F) noted below. These will help you to see the capabilities and limits of the DBMS. Be sure that everyone participates in gathering the information and discussing it! While it is best if each group member is designed a category of specification to collect, working as partners may be necessary for larger groups. Consult your instructor to make sure the work is shared evenly.

   Discuss each question below for the DBMS assigned to your group.

   A. **Data Size Limits:** Does the DBMS enforce table, data type, or column length level? If tables with lots of fields are needed for the client, this could be an issue.
   B. **Purchase Cost:** How much does the system cost? Is there a base price for the server and then additional costs for clients? Consider the pricing model for the school district listed in the Final Project Guidelines and Rubric.
   C. **Administration: Installation and Operational Costs and Considerations:** How difficult is it to install, use, and maintain? Is special expertise or an ongoing contract with the provider required?
   D. **Operating System/Hardware Requirements:** What operating systems will the DBMS work with? What are the hardware requirements to host it?
   E. **Features:** List key features of the DBMS. Include **ACID** (**a**tomicity, **c**onsistency, **i**solation, **d**urability), referential integrity, transactions, Unicode, and interface.
   F. **Performance and Scalability:** What is the speed of execution (i.e., how fast will it do what you need it to do)? What is the increase in performance when additional resources are added? For example, does it support clustering?

3. Work together to complete a brief report on the DBMS that lists its specifications and answers the questions above.
4. Fill in the table on the following page using the specifications you have gathered and answering the questions above. This information should be provided using bullet points with citations in APA style. Be sure to cite all sources!

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DBMS Specification Table

DBMS Assigned: (name/maker of DBMS here)

Specification Category	Specification/Comments
1. Data Size Limits	
2. Purchase Cost	
3. Administration	
4. Operating System/Hardware Requirements	
5. Features	
6. Performance/Scalability	

5. As a final step, each group will share their data so that everyone in the class can access it. To do this, post the completed table to the Module Five Milestone Four discussion forum. Note: Do not post your final work only to your Group Discussion forum, as all of your classmates cannot access it there; **instead, post it to the Module Five Milestone Four discussion forum in the full class discussion forum area.**

This body of information on various databases can be used to inform your work on the final project; you will have data at your disposal to review possible options for DBMS selection. Be sure to verify the accuracy of the specifications before using them in your final project!

Rubric

Guidelines for Submission: This milestone must be posted to the Module Five Milestone Four discussion forum. Text should be in bullet form. All sources should be cited using APA style.

Critical Elements	Exemplary	Proficient	Needs Improvement	Not Evident	Value
Data Size Limits	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of data size limits using specific details	Does not sufficiently discuss data size limits	Does not include data size limits	10
Purchase Cost	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of purchase cost using specific details	Does not sufficiently discuss purchase cost	Does not include purchase cost	10
Administration	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of administration using specific details	Does not sufficiently discuss administration	Does not discuss administration	10
Operating System/ Hardware Requirements	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of operating system/ hardware requirements using specific details	Does not sufficiently discuss operating system/hardware requirements	Does not discuss operating system/hardware requirements	10

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Features	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of the features using specific details	Does not sufficiently discuss the features	Does not discuss the features	10
Performance and Scalability	Meets "Proficient" criteria, and recommendations use evidence from the discussion to show both the positives and negatives of the DBMS	Includes a well-developed discussion of performance and scalability using specific details	Does not sufficiently discuss performance and scalability	Does not discuss performance and scalability	10
Articulation of Response/Citation of Sources	Submission is free of errors related to citations, grammar, spelling, syntax, and organization	Submission has some errors related to citations, grammar, spelling, syntax, or organization	Submission has major errors related to citations, grammar, spelling, syntax, organization that negatively impact readability	Submission has critical errors related to citations, grammar, spelling, syntax, or organization that prevent understanding of content	10
Posting of Final Data and Summary		Group posted their findings in the correct place		Group did not post their findings in the correct place	5
Participation (Graded Individually)		Team member participated with appropriate engagement and proficiency in this project	Team member participated at a level that did not rise to the requirements of the project	Team member did not participate	25
Comments:				**Earned Total**	**100%**