Southern New Hampshire University

IT 505: Final Project Guidelines and Rubric

Overview

The final project for this course is an **operating system upgrade implementation brief**, containing three deliverables (a written report, an information assurance presentation, and web-technology tutorials) to illustrate implementation of provided components of an operating system upgrade plan. Using the scenario given, you will complete the implementation tasks as described for the operating system upgrade.

Course Outcomes

- Assess the capabilities of basic computer networks in terms of scope and scale for their ability to address enterprise needs
- Modify basic behaviors in computer programs to meet specified criteria
- Differentiate between fundamental data storage and fundamental data retrieval systems for determining appropriate management of data within an enterprise
- Manipulate basic web technologies for optimal use and function
- Analyze fundamental components of information assurance practices to maximize the security of enterprise systems

Prompt

Your final project will address the following scenario: You are a new employee at an IT help desk. The organization that you work for has computers that are due for an operating system (OS) upgrade. Your supervisor has provided you with tasks needed to facilitate a smooth upgrade process. You will use the provided elements to explain and illustrate the implementation of an operating system upgrade. You will write a report design a presentation and create two brief tutorials.

Specifically, the following **critical elements** must be addressed:

Written Report:

I. Using the provided **coding**, determine modifications to the code in order to communicate to employees about the pending operating system upgrade through a display on their desktop computer screen.
   a) Identify five **components** of the code, indicating their role in programming. Be sure to address all five components.
   b) **Modify** existing code to generate a new message to employees that informs them of the anticipated date for the upgrade. Use screenshots to illustrate the working code before and after modification.
   c) **Describe** the changes made and why they were necessary.

II. Using the provided illustration of the **network configuration** for the organization, give a detailed description of the computer network. The description will be used by Help Desk staff to provide necessary support to employees.
   a) Network Configuration – **Explanation**: Describe the configuration of the network, explaining the role of each component and connection.

b) Network Configuration – **Evaluation**: Describe the critical components that may be missing from the diagram, which are necessary for a network to function properly. Provide a rationale for including the missing critical configuration components, based on the function of each missing component.

III. Using the provided **database**, create a database report and modify the appropriate components with information regarding the employees' computers and upgrade dates. Then, run the associated query to produce a report for Help Desk staff to aid them when communicating with employees.

a) Database **Examination**: For each table in the database, compare the datasheet view with the design view. Make sure to describe what each table contains and any data types other than text.

b) Database **Modification**: Select the correct table and modify this table by creating a new data field with the appropriate data type required. Then enter the appropriate upgrade information based on group number. Describe the steps you have taken to make these alterations.

c) Database **Query**: Run the appropriately named query and describe what data is being pulled. Discuss the links established between tables within the query. How do the linkages between tables affect the ability to pull correct data? Explain. Screenshots may be used to support your claims.

Information Assurance Presentation:

IV. Prepare a three-slide **presentation** explaining information assurance needs, including risks associated with non-adherence to processes, and countermeasures to mitigate risks.

a) Information Assurance: Provide a **description** (one slide) of information assurance and associated needs for this upgrade

b) **Risks**: Explain the risks associated with non-adherence to information assurance processes (one slide) in this scenario

c) **Countermeasures**: Describe specific ways to address and mitigate risks associated (one slide)

Web-Technology Tutorials:

V. Prepare two one-page web-technology **tutorials** for setting the company website as the homepage and for enabling and disabling cookies.

a) **Homepage**: Create a one-page tutorial for setting the company website as the homepage for newly updated computers. Make sure to indicate web browser specifications.

b) **Cookies**: Create a one-page tutorial for enabling and disabling cookies, including web browser specifications.

Milestones

Milestone One: *Programming Report*

In **Module Two**, you will prepare and submit a report with the provided code modified to display a new message to the employees informing them about the operating system upgrade. **This milestone is graded with the Milestone One Rubric.**

Milestone Two: *Networking and Database Reports*

In **Module Five**, you will prepare networking and database reports for the scenario provided. For the networking report, describe the network configuration, explaining the role of each component and connection, following the diagram provided by your supervisor. Write a short description of any components you think are missing from the network diagram and provide a potential rationale of why you think these components are critical to the network. Specifically, state the functions of the components and how they contribute to the network. For the database report, modify the appropriate components of the provided database with the information regarding the employees' computers and the upgrade. The table containing the date of each computer's upgrade should be

updated upon completion of this upgrade. The query identifying each employee's upgrade date should be run. This will serve as the type of report that would be given to Help Desk staff to communicate with employees. **This milestone is graded with the Milestone Two Rubric.**

Milestone Three: *Information Assurance and Web Technologies Communications*
In **Module Seven**, you will submit **a three-slide presentation explaining information assurance needs,** including risks associated with non-adherence to processes and describing countermeasures to mitigate risks, and **two one-page tutorials** for setting the company website as the homepage and for enabling and disabling cookies. **This milestone is graded with the Milestone Three Rubric.**

Final Submission: *Operating System Upgrade Implementation Brief*
In **Module Nine**, you will submit your **operating system upgrade implementation brief**. This should be a complete, polished artifact containing **all** of the deliverables (written report, information assurance presentation, and web-technology tutorials). **The final submission should reflect the incorporation of feedback received and will be graded using the Final Product Rubric.**

Deliverables

Milestone	Deliverables	Module Due	Grading
1	Programming Report	Two	Graded separately; Milestone One Rubric
2	Networking and Database Reports	Five	Graded separately; Milestone Two Rubric
3	Information Assurance and Web Technologies Communications	Seven	Graded separately; Milestone Three Rubric
	Final Product: Operating System Upgrade Implementation Brief	Nine	Graded separately; Final Product Rubric

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Final Product Rubric

Guidelines for Submission: Written components of project must follow these formatting guidelines when applicable: double spacing, 12-point Times New Roman font, and one-inch margins.

This activity uses an integrated rubric in Blackboard. Students can view instructor feedback in the Grade Center. For more information, review these instructions.

Critical Elements	Exemplary	Proficient	Needs Improvement	Not Evident	Value
Code: Components	Meets "Proficient" criteria and applies appropriate IT terminology in explanation (100%)	Comprehensively explains the programming role for the five identified components in the code (90%)	Explains the programming role for the five identified components in the code, but explanation lacks clarity or includes inaccuracies (70%)	Does not explain the programming role for five components in the code (0)%	7
Code: Modification	N/A	Correctly modifies existing code to generate a new message displayed through screenshots, illustrating the code before and after modification (100%)	Modifies existing code, but code is inaccurate or modifications are not illustrated through screenshots (70%)	Does not modify the existing code (0%)	7
Code: Description	Meets "Proficient" criteria, and explanation is supported with specific examples to support claims (100%)	Comprehensively explains the changes made to the original code and why the changes were necessary (90%)	Explains the changes made to the original code, but does not provide details about why the changes were necessary, or explanation lacks detail (70%)	Does not explain the changes made to the original code (0%)	7
Network Configuration: Explanation	Meets "Proficient" criteria, and the connections drawn between components are exceptionally articulated (100%)	Explains the configuration of the network, including the role of each component and connection (90%)	Explains the configuration of the network, but does not address the role of each component and connection or explanation is inaccurate or lacks in detail (70%)	Does not explain the configuration of the network (0%)	7

Network Configuration: Evaluation	Meets "Proficient" criteria, and justification is well-developed, defining possible interactions with current components (100%)	Evaluates the diagram for missing critical components, giving justification for why these components are functionally necessary to a network (90%)	Evaluates the diagram for missing critical components, but does not give justification for why these components are functionally necessary to a network, or evaluation is inaccurate or lacks in detail (70%)	Does not evaluate the diagram for missing critical components (0%)	7
Database: Examination	Meets "Proficient" criteria and clearly articulates the interrelationships between the two views (100%)	Compares the datasheet view to the design view of a table within the database, describing the contents and data types (90%)	Compares the datasheet view to the design view of a table within the database, but does not describe both the contents and data types or comparison lacks clarity (70%)	Does not compare the datasheet view to the design view of a table within the database (0%)	7
Database: Modification	Meets "Proficient" criteria, and explanation includes additional attributes providing further clarification (100%)	Comprehensively explains the steps taken to modify a table through the creation of a new data field (90%)	Explains the steps taken to modify a table through the creation of a new data field, but explanation is not comprehensive, or the explanation contains inaccuracies (70%)	Does not explain the steps taken to modify a table through the creation of a new data field (0%)	7
Database: Query	Meets "Proficient" criteria and provides evidence to support claims (100%)	Describes the query results and the links established between tables within the query, and how they affect the ability to pull correct data (90%)	Describes the query results, but does not address the links established between tables within the query or does not address how they affect the ability to pull correct data, or description contains inaccurate or unclear details (70%)	Does not describe the query results (0%)	9
Presentation: Description	Meets "Proficient" criteria, and presentation slide is visually appealing (100%)	Provides a brief description of information assurance and the information assurance needs associated with this operating system upgrade (90%)	Provides a brief description of information assurance, but does not include the information assurance needs associated with this operating system upgrade, or the description is inaccurate or lacks detail (70%)	Does not provide a brief description of information assurance (0%)	8

Presentation: Risks	Meets "Proficient" criteria, and presentation slide is visually appealing (100%)	Indicates risks associated with non-adherence to information security processes in this scenario (90%)	Indicates risks associated with non-adherence to information security processes, but misses key components or does not connect them to this scenario (70%)	Does not explain risks associated with non-adherence to information security processes (0%)	7
Presentation: Countermeasures	Meets "Proficient" criteria, and strategies are realistic and supported by reliable evidence of success (100%)	Describes appropriate mitigation strategies for addressing risks associated with this operating system upgrade (90%)	Describes mitigation strategies for addressing risks, but they are not associated with this operating system upgrade or they are not appropriate (70%)	Does not describe mitigation strategies for addressing risks (0%)	7
Tutorials: Homepage	Meets "Proficient" criteria, and directions are clear and universally consumable (100%)	Provides detailed instructions for setting the company website as the homepage for newly updated computers, including web browser specifications (90%)	Provides instructions for setting the company website as the homepage for newly updated computers, but instructions are not accurate or lack detail (70%)	Does not provide instructions for setting the company website as the homepage for newly updated computers (0%)	8
Tutorials: Cookies	Meets "Proficient" criteria, and directions are clear and universally consumable (100%)	Provides detailed instructions for enabling and disabling cookies, including web browser specifications (90%)	Provides instructions for enabling and disabling cookies, but instructions are not accurate or lack detail (70%)	Does not provide instructions for enabling and disabling cookies (0%)	8
Articulation of Response	Submission is free of errors related to citations, grammar, spelling, syntax, and organization and is presented in a professional and easy-to-read format (100%)	Submission has no major errors related to citations, grammar, spelling, syntax, or organization (90%)	Submission has major errors related to citations, grammar, spelling, syntax, or organization that negatively impact readability and articulation of main ideas (70%)	Submission has critical errors related to citations, grammar, spelling, syntax, or organization that prevent understanding of ideas (0%)	4
				Earned Total	**100%**