Southern New Hampshire University

IT 200 Final Project Guidelines and Rubric

Overview

Successful professionals in the IT environment need to be familiar with the fundamental IT tools and applications that are used in everyday functions and know how these tools and applications interrelate. The final project for this course is a Company Consult Debrief that illustrates a systems view of a company's technology infrastructure and the interrelationships between components such as networks, data management, programming, web technologies, and information assurance. A detailed company scenario is provided, with supporting databases, tables, table inventory, and query orders.

Three milestones support the development of the project. These are designed to scaffold learning and ensure quality final submissions. These milestones will be submitted in **Modules Three, Five, and Six**. The final submission will occur in **Module Seven**.

This assessment will assess your mastery with respect to the following course outcomes:

- Apply fundamental IT terminology appropriately in highly structured situations
- Illustrate the applicability of foundational information technologies for specific professional environments
- Assess fundamental IT concepts at the component level in rationalizing recommendations for business environments
- Illustrate interrelationships among key concepts of IT for developing a systems view of information technology

Prompt

Scenario: The new owner of Swagger Distribution Company, a company that distributes clothing and apparel, does not have experience with IT-related problem solving, so she is contracting you, an IT consultant. You will review the company's technology infrastructure and the interrelationships between components such as HCI, networks, data management, programming, web technologies, and information assurance. You will assess the current infrastructure and programming modifications, network optimization, and improvements to security procedures, and provide your feedback and recommendations.

1. **Human-Computer Interface (HCI):** On a daily basis, Swagger Distribution's employees log in to the company's network and utilize many different types of software and the internet. They use Microsoft Word and Microsoft Visio daily.
2. **Databases:** Swagger Distribution's partners/customers include a variety of clothing companies. Swagger Distribution utilizes a database to store information on the partner companies and the orders that are received. You will review the provided database for Swagger Distribution and summarize what the tables contain and what the queries do. Be sure to apply key terms that you have learned such as "metadata." Based on information provided, you will change one data type in one of the tables.
3. **Programming:** Every day, when an employee of Swagger Distribution signs on to her computer, a pop-up window opens and gives a greeting to the employee. The new owner would like to continue to have the pop-up window but would like to change the greeting.
4. **Networking:** There are two possible configurations for Swagger Distribution's network: a wired version and a wireless version.
5. **Web Technologies:** Swagger Distribution is in the process of designing a new website using HTML5 (HyperText Markup Language).
6. **Information Security:** There is no current information security standard at Swagger Distribution. You know that one needs to be implemented.

Your Company Consult Debrief should address the information technology needs for Swagger Distribution listed above.

Specifically, the following critical elements must be addressed:

I. **Human–Computer Interaction (HCI) Consult**
   a. **Summary** – Summarize the human–computer interactions (HCI) problem the company is experiencing. Be sure to list all aspects of the problem and explain their importance to the usability of the software. For example, you might identify components of Microsoft Office applications such as Word or Visio, discussing all aspects of the HCI and explaining their importance to the usability of this software.
   b. **Recommendation** – Suggest an enhancement to one of the applications for improving its HCI, providing supporting examples/research for your suggestion.
   c. **Illustration** – Create a one-page tutorial for Microsoft Visio, including component screenshots, for new employees who are familiar with Microsoft Word but have never used Microsoft Visio. To comprehensively address this element, you should cover at least two basic functions and/or menu options.
   d. **Identification** – Use fundamental IT terminology to label components in the tutorial and appropriately in the summary. To comprehensively address this element, you would label at least five components in the tutorial.

II. **Information Management/Database (IMD) Consult**
   a. **Summary** – Summarize the information management/database (IMD) items of the distribution company, listing all tables and all queries, summarizing what the tables contain and what the queries do.
   b. **Edit** – Based on the information provided, add a new data type to the table, enter the data, and describe your actions.

III. **Programming Consult**
   a. **Modification** – Based on the request provided by the new owner, change the display message of the provided code that is currently used to a new display message.
   b. **Illustration** – Include the key components of the line of code provided, highlight what needs to be modified, and provide the revised code.
   c. **Identification** – Use fundamental IT terminology to label components of the code provided.

IV. **Networking Consult**
   a. **Summary** – Summarize the wired networking configuration from the diagram provided and use this to create and describe a Visio diagram to represent a wireless networking configuration appropriate for the company.
   b. **Identification** – Use fundamental IT terminology to label all aspects of the network components in the visual representation.

V. **Web Technologies Consult**
   a. **Summary** – Summarize key components of a potential website that would effectively address the company's needs. In order to comprehensively address this element, you should include at least 10 components in your summary.
   b. **Recommendation** – Provide practical suggestions on aspects that would ensure the quality of the website in meeting the company's needs, explaining your rationale behind the proposed suggestions.
   c. **Illustration** – Provide a visual representation of these components as deployed in an existing website or websites that will support the functionality you address in your recommendations. For example, this is where you might supply screenshots of aspects of the website that would support the functionality your suggestions offer.

VI. **Information Security Consult**
   a. **Summary** – Summarize the information security issues facing the company and discuss information security practices, providing real examples of information security assurance failures that can be used in helping the client to understand the risk.
   b. **Recommendation** – Recommend information security practices that will address these issues. Provide supporting examples/research/justification for your recommendations.
VII. **Summary of IT Systems Consultations**
   a. **Interrelationships** – Explain how network, database, web technology, computers, programming, and security systems interrelate using the distribution company as an example.
   b. **Conclusion** – Provide a clear rationale to illustrate the importance for this company to understand IT technologies and to stay informed of changes and new risks to its IT system.

Milestones

Milestone One: *HCI and IMD Programming Consult Summaries*
In **Module Three**, you will submit **a document summarizing the HCI and IMD** of the distribution company, **including your suggestions for changes.** A visual representation will be submitted for each summary using appropriate IT terminology. **This milestone is graded with the Milestone One Rubric**.

Milestone Two: *Programming Consult Summaries and Network*
In **Module Five**, you will submit **a document summarizing programming components as well as wired and a potential wireless network configuration** using appropriate IT terminology. A labeled, visual representation of the wireless network configuration will be submitted. **This milestone is graded with the Milestone Two Rubric**.

Milestone Three: *Web Consult Summaries and Information Security Consult Summary*
In **Module Six**, you will submit **a document summarizing suggested web technologies for the website for the distribution company and information security needs and recommended practices of the distribution company**. A visual representation of the information security system will be submitted, labeled using appropriate IT terminology. **This milestone is graded with the Milestone Three Rubric**.

Final Product: *Company Consult Debrief—Overall System Summary*
In **Module Seven**, you will submit **a final document** that builds upon all of the previously completed milestone summaries to provide an **overall summary of the distribution company's IT system as a whole, illustrating how each individual system/component** (HCI, database, programming, network, web technology, and security) interrelates with others. Provide a clear rationale to illustrate the importance for this company to understand IT technologies and to stay informed of changes and new risks to its IT system. It should be a complete, polished artifact containing **all** the critical elements of the final product. It should reflect the incorporation of feedback gained throughout the course. **It will be graded using the Final Product Rubric**.

Deliverables

Milestone	Deliverables	Module Due	Grading
One	HCI, IMD, and Summaries	Three	Graded separately; Milestone One Rubric
Two	Programming Consult and Network Summaries	Five	Graded separately; Milestone Two Rubric
Three	Web Consult and Information Security Consult Summary	Six	Graded separately; Milestone Three Rubric
	Final Product: Company Consult Debrief – Overall System Summary	Seven	Graded separately; Final Product Rubric

Final Product Rubric

Guidelines for Submission: Written components of the project must follow these formatting guidelines when applicable: double spacing, 12-point Times New Roman font, and one-inch margins. Remember to review the feedback from your milestone drafts and incorporate it as you build out the final draft of your complete paper. The completed paper should be approximately 5 to 10 pages in length, not including cover page, screenshots and resources, and written in paragraph form. Use this Final Project template to guide you when creating and submitting your final project. Tables should be prepared in Microsoft Access. Diagrams should be prepared using Visio.

Critical Element	Exemplary (100%)	Proficient (85%)	Needs Improvement (55%)	Not Evident (0%)	Value
HCI Consult: Summary	Meets "Proficient" criteria and uses industry-specific language to establish expertise	Comprehensively lists aspects of the human—computer interactions (HCI) problem and explains their importance to the usability of the software	Lists aspects of the human—computer interactions (HCI) problem, but does not explain their importance to the usability of the software, or description lacks detail or is not accurate	Does not list aspects of the human—computer interactions (HCI) problem	6
HCI Consult: Recommendation	Meets "Proficient" criteria and suggestion is well-informed and integrates relevant theories and research	Suggests enhancement for improving HCI and justifies suggestion with examples or research	Suggests enhancement for improving HCI, but does not justify suggestion with examples or research, or suggestion is not appropriate	Does not suggest enhancement for improving HCI	6

	Meets "Proficient" criteria and provides comprehensive details for understanding of Microsoft Visio	Creates a Microsoft Visio tutorial, including screenshots, covering basic functions for new employees who are familiar with Microsoft Word	Creates a Microsoft Visio tutorial for new employees who are familiar with Microsoft Word, but does not include screenshots, or tutorial is unclear or lacks detail	Does not create a Microsoft Visio tutorial	5
HCI Consult: Identification	Meets "Proficient" criteria and establishes expertise using specific industry language	Accurately labels components of the tutorial and summary using fundamental IT terminology	Labels components of the tutorial and summary using fundamental IT terminology, but labels are not accurate	Does not label components of the tutorial and summary	4
IMD Consult: Summary	Meets "Proficient" criteria and uses industry-specific language to establish expertise	Comprehensively summarizes the information management/database items	Summarizes the information management/database items, but summary lacks detail or is not accurate	Does not summarize the information management/database items	6
IMD Consult: Edit	Meets "Proficient" criteria and description is comprehensive	Accurately adds new data type to table, enters data, and describes actions	Adds new data type to table but does not enter data or new data type is not accurate	Does not add new data type and data to table	4
Programming Consult: Modification	Meets "Proficient" criteria and modification is described using industry-specific language	Accurately changes the display message of the code as requested	Changes the display message of the code, but change is not accurate or does not comply with request	Does not change the display message of the code	4
Programming Consult: Illustration	Meets "Proficient" criteria and identifies key components demonstrating expertise in using code	Includes the key components of the line of code provided, highlights what needs to be modified, and provides the revised code	Includes the key components of the line of code provided, but does not highlight what needs to be modified or does not provide the revised code	Does not include the key components of the line of code provided	6
Programming Consult: Identification	Meets "Proficient" criteria and uses professional language	Accurately labels components of the code provided using fundamental IT terminology	Labels components of the code provided using fundamental IT terminology, but labels are not accurate	Does not label components of the code provided	4
Networking Consult: Summary	Meets "Proficient" criteria and the proposed wireless configuration is logical and appropriate for the business needs	Comprehensively summarizes the wired network configuration for the company, creates and describes a visual representation of a wireless configuration for the company	Summarizes the wired network, attempts to create and describe a visual representation of a wireless configuration for the company, but key aspects of the configurations are missing or not correctly identified	Does not summarize the network configuration for the company, or does not create and describe a visual representation of a wireless configuration	6

Networking Consult: Identification	Meets "Proficient" criteria and uses professional language demonstrating an advanced understanding of networking concepts	Accurately labels components of the network in the visual representation using fundamental IT terminology	Labels components of the network in the visual representation of the wireless configuration using fundamental IT terminology, but labels are not accurate	Does not label components of the network in the visual representation	4
Web Technologies Consult: Summary	Meets "Proficient" criteria and explanation demonstrates an advanced understanding of web technology options	Comprehensively summarizes key components of a website that would effectively address the company's needs	Summarizes key components of a website, but summary lacks detail or does not address the company's needs	Does not summarize key components of a website that would effectively address the company's needs	6
Web Technologies Consult: Recommendation	Meets "Proficient" criteria and makes suggestions for optimal performance	Provides practical suggestions on aspects that would ensure the quality of the website in meeting the company's needs and explains the rationale behind proposed suggestions	Provides practical suggestions on aspects that would ensure the quality of the website in meeting the company's needs, but does not explain the rationale behind proposed suggestions	Does not provide practical suggestions on aspects that would ensure the quality of the website in meeting the company's needs	6
Web Technologies Consult: Illustration	Meets "Proficient" criteria and demonstrates the applicability of the recommended web technologies to the company through choice of highly relevant examples for this professional environment	Provides an accurate visual representation of aspects as deployed in an existing website or websites that supports functionality addressed in recommendations	Provides a visual representation of aspects as deployed in existing website or websites but representation does not support functionality addressed in recommendations or is not accurate	Does not provide a visual representation of aspects as deployed in existing website or websites	6
Information Security Consult: Summary	Meets "Proficient" criteria and examples of information security assurance failures are relevant to the company in the scenario	Comprehensively summarizes the information security issues facing the company and discusses information security practices, and provides real examples of information security assurance failures	Summarizes the information security issues facing the company but does not discuss information security practices or does not provide real examples of information security assurance failures	Does not summarize the information security issues facing the company	6
Information Security Consult: Recommendation	Meets "Proficient" criteria and recommendations are well supported with relevant examples and/or research	Recommends appropriate information security practices that address issues and justifies recommendations with examples and/or research	Recommends information security practices but recommendations are not appropriate or are not justified with examples and/or research	Does not recommend information security practices	6

Summary: Interrelationships	Meets "Proficient" criteria and illustrates expertise demonstrating a systems view of IT	Describes the interrelationships among network, database, web technology, computers, programming, and security systems using the company as an example	Identifies the interrelationships but description lacks detail in how the components are connected with one another within this company	Does not describe interrelationships	6
Summary: Conclusion	Meets "Proficient" criteria and provides specific examples from similar organizations encountered during research	Comprehensively justifies the importance for this company to understand IT technologies and to stay informed of changes and new risks to its IT system	Explains the importance for this company to understand IT technologies and to stay informed of changes and new risks to its IT system but rationale lacks detail or key considerations for this company	Does not explain the importance for this company to understand IT technologies and to stay informed of changes and new risks to its IT system	6
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	Submission has no major errors related to citations, grammar, spelling, syntax, or organization	Submission has major errors related to citations, grammar, spelling, syntax, or organization that negatively impact readability and articulation of main ideas	Submission has critical errors related to citations, grammar, spelling, syntax, or organization that prevent understanding of ideas	3
				Total	**100%**