

# Instructional Scenario

## Mastering the Machine:

## A Guide to Efficient Computer Management



Course/Duty Area: Computer Information Systems/Managing Computer Systems

### Scenario:

A small business is experiencing issues with its computer systems, including slow performance, an unorganized file storage, and inadequate security measures. The business owner seeks advice on how to manage these systems efficiently to improve productivity and protect sensitive information.

### Big Question:

How can effective computer management practices improve system performance, security, and overall efficiency?

### Focused Questions:

- What are the key components of a well-managed computer system?
- How can users optimize system performance through software and hardware management?
- What strategies can be implemented to secure data and protect against cyber threats?
- What tools and techniques are available to organize and maintain file systems effectively?

### Student Project or Outcome:

Students will work in teams to create a Comprehensive Computer Management Guide for small businesses. This guide will include step-by-step instructions, recommendations for tools, and tips for maintaining a secure, high-performing system. Students will also deliver a presentation to "business clients" (their classmates or community members).

### Project-Based Assessment:

- **Guide Creation (50%):** Teams will develop a detailed and visually engaging guide addressing performance optimization, security strategies, and file management.
- **Presentation (30%):** Teams will present their guide, simulating a business consulting scenario.
- **Peer Feedback (10%):** Students will evaluate each other's presentations using a rubric, focusing on clarity, creativity, and practicality.
- **Reflection (10%):** Each student will submit a reflection discussing their contributions, challenges faced, and key takeaways.

### Teacher Resources:

- **Textbook/Articles:** Chapters or articles on computer maintenance and security best practices
- **Tools:** Microsoft Word/Google Docs (for guide creation), Canva (for visual design), and PowerPoint/Google Slides (for presentations)
- **Video Tutorials:** YouTube or LinkedIn Learning videos on topics like disk cleanup, virus protection, and file

organization

- **Sample Templates:** Pre-designed guide layouts and file management checklists
- **Rubrics:** Pre-defined assessment rubrics for the guide, presentation, and peer feedback
- **Guest Speaker:** An IT professional to discuss real-world computer management challenges and solutions

*Scenario submitted by Kimberly Grant, Warwick High School, Newport News Public Schools*