

Gerald Reitmeyer, David Prutch, Jason Jung, Wayne Brandon

- Copy and paste your team's scenario into the doc with a header.

Scenario and Requirements

Your instructor will provide the project guidelines and send you the scenario unique to your team. Some aspects of the project are left up to you to decide how to approach.

- Specific scenarios will be sent to you by your instructor.
- [201 Project Requirements](#)

Systems Selection

Review the project guidelines and scenario. Meet as a team and decide what systems, platforms, or tools you'll be using this project. Each should represent a clear, logical solution to a problem the client company is facing.

Create a high-level list of systems, platforms, or tools you're going to implement for your client. For each, explain:

1. How does it fit into your scenario's requirements?
2. What problem or pain point does it solve? In other words, what value does this add to your client?
 - Keep it high level without going into too much detail, 3-4 sentences is enough.
3. Minimum Viable Product (MVP) definition.
 - What is the minimum required for you to present on your demo day?

During your pitch, your instructor will help you scope your project. Some features may become MVP and some may become stretch goals.

Once you are ready, find your instructor and pitch your solution ideas.

1. Virtual Machine - Server
 - a. AWSHosted cloud server - Linux.
 - i. Solves the issue of needing a database-backed inventory system using off the shelf commercial software.
 - ii. The company will no longer need to keep paper files and receipts in file cabinets. Having everything digital with daily backups.

- iii. MVP - Linux DB set up with daily scheduled backups saved as a share drive to user windows machines.
- iv. NolaPro - Free, open-source inventory management system.
 - 1. Has integrated PoS, eCommerce, Accounting, Employee Management, and many more systems available.
 - 2. Downloadable and can be installed directly to Linux Server.
 - 3. Has integrated GUI that can be installed on Windows 10 Machines.

2. Operating Systems

- a. Windows 10 pro for general use OS
 - i. Provides on-prem computers for managerial staff and employees who need computers.
 - ii. Resolves employees using their own laptops and allows direct access to a shared server for file sharing and backup.
 - iii. MVP - Single example of Windows 10 pro system with admin account created, set up with security features, daily file backups scheduled and .iso created to replicate for new users.

3. Backup System

- a. Scheduled snapshots on linux server vm hosted on aws, robocopy command in batch file set scheduled daily with task scheduler, second backup server
 - i. Provides data security
 - ii. Backing up all data to ensure nothing is lost in the event something goes down.
 - iii. MVP - example of backups that have been run successfully.

4. File and System sharing network

- a. Use a linux VM as a file sharing server using Samba Share to mount locally to each machine.
 - i. Since it's going to be hosted on amazon, it can be ran and maintained from anywhere
 - ii. MVP - Linux VM running and verified working
 - iii. Utilize Sambashare's user-level security features for security.

5. Remote Access

- a. Use the native RDP in windows
 - i. Allows you to RDP into any OS and comes with any installation of windows 10 pro
 - ii. Allows remote access for admin accounts,password protected, includes lockout policy.
 - iii. MVP - One person can RDP in for their portion of the presentation.

6. Security Best Practices recommendations for Users Document - stretch goal

- a. Good password practices 12-14 characters, log out when not at machine or end of day, do not open unknown files, do not download files from untrusted sources.
 - i. Prevents Passwords from being easily cracked. Prevents people who are not authorized to use the machines from having access. Protects the system from harmful files.
 - ii.
- 7. Data Destruction
 - a. Boot & Nuke DoD method - customer ships us HDs and we destroy data.
 - i. Makes data unrecoverable but takes awhile
 - ii. If they need to destroy data it will be handled by our team in a secure manner.
 - iii. MVP - Discuss the process of data destruction and using Dban.
- 8. IT Support System
 - a. Possible use of spiceworks for ticket tracking.
 - i. Allows support to track, troubleshoot, and document any issues that happen and how to fix them
 - ii. Relieves the burden of system related issues from having to be resolved by the customer.
 - iii. MVP - Example of ticketing system showing an open ticket with troubleshooting process being executed.
 - b. Engagement/Interactions
 - i. Email and phone IT support options available to customer
 - ii. Professional Courteous demeanor when speaking to customers.
 - c. Remote Engagement
 - i. Use CompTIA Troubleshooting Methodology
 - ii. Use a secure admin RDP connection or PSRemote to connect to the machine to resolve the issue.
- 9. System Security
 - a. Windows Defender, Firewall rules, and malware bytes
 - i. Secures and protects customer data
 - ii. Protects the customer from attacks, malware.
 - iii. MVP - Windows 10 system with real-time antivirus updated and running, malware bytes installed updated and running, Firewall enabled.
- 10. Email Client
 - a. Install Thunderbird
 - i. MVP having thunderbird installed using Windows 365 account
 - ii. Provide all users with work email backed by microsoft email service

- iii. MVP - Thunderbird installed with working connection to Microsoft 365 account.

11. Inventory management and POS

- a. NolaPro software <https://www.nolapro.com/downloads>
- b. Solves requirements for off the shelf inventory management, will integrate POS in the future when the customer is ready. Replaces old paper file inventory system. Downloadable and can be integrated on the server.
- c. MVP - Basic working inventory control system set up and attached to DB.

12. Internal Network using pfSense

- a. Set up private network with pfSense
- b. More security for network.
- c. MVP - working pfSense VM with Windows 10 connected to network via internal network.

Scope creep can be dangerous! Keeping your project within a predetermined scope will help the group stay on task without going off on tangents and side features.

Problem Domains:

Submitting your work

This is a group submission. Only one person must submit for group credit.

Please have everyone's name at the top of the Google Doc.

Share your Google Doc so that "Anyone with the link can comment" in the submission field below.

This step must be completed and approved before proceeding with any project work. Notify your instructor when this is ready for review.