Part 1 Client Brief

Introduction

ScottishGlen (the client) is a medium-sized company within the energy sector. After recovering from a recent security incident, management is looking at ways to improve the company's security posture. A security consultant has advised that the company should consider the CIS Critical Security Controls[1]. According to the CIS a good first step is tracking enterprise assets within the company. This will allow the company to better manage its network and reduce the risk of future security incidents.

The company requires you to design and develop a lightweight Asset Tracking System which can be used to manage assets on the network. The software should be implemented to the specifications of the client, which are provided below.

Client Brief

The client requests that a software system is designed and developed to track assets within the company. All asset information should be stored in a database. It is envisioned that this database could also be used by other company systems in the future.

Assets include any hardware being used on the company network. It must be possible to add, view, edit, or delete asset data. The client would like the software to automatically get hardware data from the system on which it is running. You are encouraged to research and suggest useful data fields, but at a minimum the system name, model, manufacturer, type, and IP address should be stored. Some assets have a physical sticker with the purchase date, which would be useful to capture. It should also be possible for a text note to be added, which can contain any extra data the company may want to capture about the specific asset. Your initiative and research in identifying useful asset data fields is welcomed.

The system must make data acquisition as easy as possible. It is expected that database communication will have a minimal response time and that screen refresh time will not delay entry of data. Clear instructions must be visible to the user who will capture asset data, and a minimal learning curve is expected (user training time should be less than 30 minutes). The client operates a Microsoft environment, and the system must be able to run on a Windows 10 machine.

[1] https://www.cisecurity.org/controls/cis-controls-list

Instructions

The client would like to see a prototype of your system by **Week 7** of the Term. The prototype should show (at least) the full functionality for adding an asset. You must submit the following:

1. Documentation which includes:
    a. Requirements specification for the system, classified as functional and non-functional requirements.
    b. UML diagrams to illustrate your system design, consisting of:
        i. Use Case description and diagram for adding an asset.
        ii. Class diagram of your system.
    c. One-page explanation of what agile development methodology was used and how it was applied to your development process. Include a screenshot of your Kanban board or any similar tools you are using to manage your workflow.
2. Git repository containing the source code of the system and showing your commit history.
3. Screen recording with voice explanation of how the prototype of your system works and features it has implemented. The recording should demonstrate the use case for adding an asset, showing that data is successfully stored in the database. You may briefly discuss the code to accomplish this, but the recording should be no more than 5-minutes.