**402IT Information Security**

**Assignment 1 Case Study 1**

New England Hospital, the first of its kind in England, opened in Maidstone, Kent on the 4th of May 2022. It provides medical services for patients suffering from long COVID. The site provides 300 beds for rehabilitation to those who have been in hospital for routine treatment.

Different types of operating systems are used within the Hospital IT Services: Windows Server 2016 and 2019; Windows Workstations 8 and 10, and Linux based machines.

Legacy Windows XP systems still exist, which provide mission critical medical applications.

Online Web Services via the Internet allow patients to access their medical records. Patients can access information relative to their care, book available consultation appointments also change or cancel bookings dependent upon their individual circumstances.

All this information is critical to the effective operation of the hospital. Patients include NHS referred and private care individuals who require log-in user accounts to access the Online Hospital Services via a website.

Patient information is held on Linux based SQL database servers, J2EE Glass Fish application servers and a web application server for employees to access. Log-in accounts enable access to these systems, and it is understood that passwords currently provide protection.

The company adopts the Java Resource Adapter Architecture for the log-in capability. This has many components consisting of active directories, web servers, and SQL databases. These connections are called realms, and the Hospital must ensure that all information remains confidential to maintain patient confidentiality and comply with data protection Laws.

The hospital operates a building wide local area network upon which all these systems operate. Log-in credentials must also be provided to a network of dispensing pharmacies in the Kent Region to enable access to patient prescription data. Pharmacies will provide on-going medication for outpatients once they have been discharged from hospital. Access to this information is provided over the Internet using the hospital website. You are required to research the systems and services used by the hospital and unless otherwise stated in the case study, no cyber security controls or technologies exist within the current environment.