

INFO 5100- Application Engineering & Development- Final Project

One of the primary dangers of the COVID-19 pandemic in the world is its potential to overwhelm the healthcare system. Hospital beds, nurses, PPE, ventilators, and other resources are required to take care of people infected with COVID-19 who require hospitalization, yet these are limited resources and many hospitals are short on some or all of them. While hospitals are able to create some additional capacity by converting beds and re-using PPE, these methods are often insufficient or unsustainable.

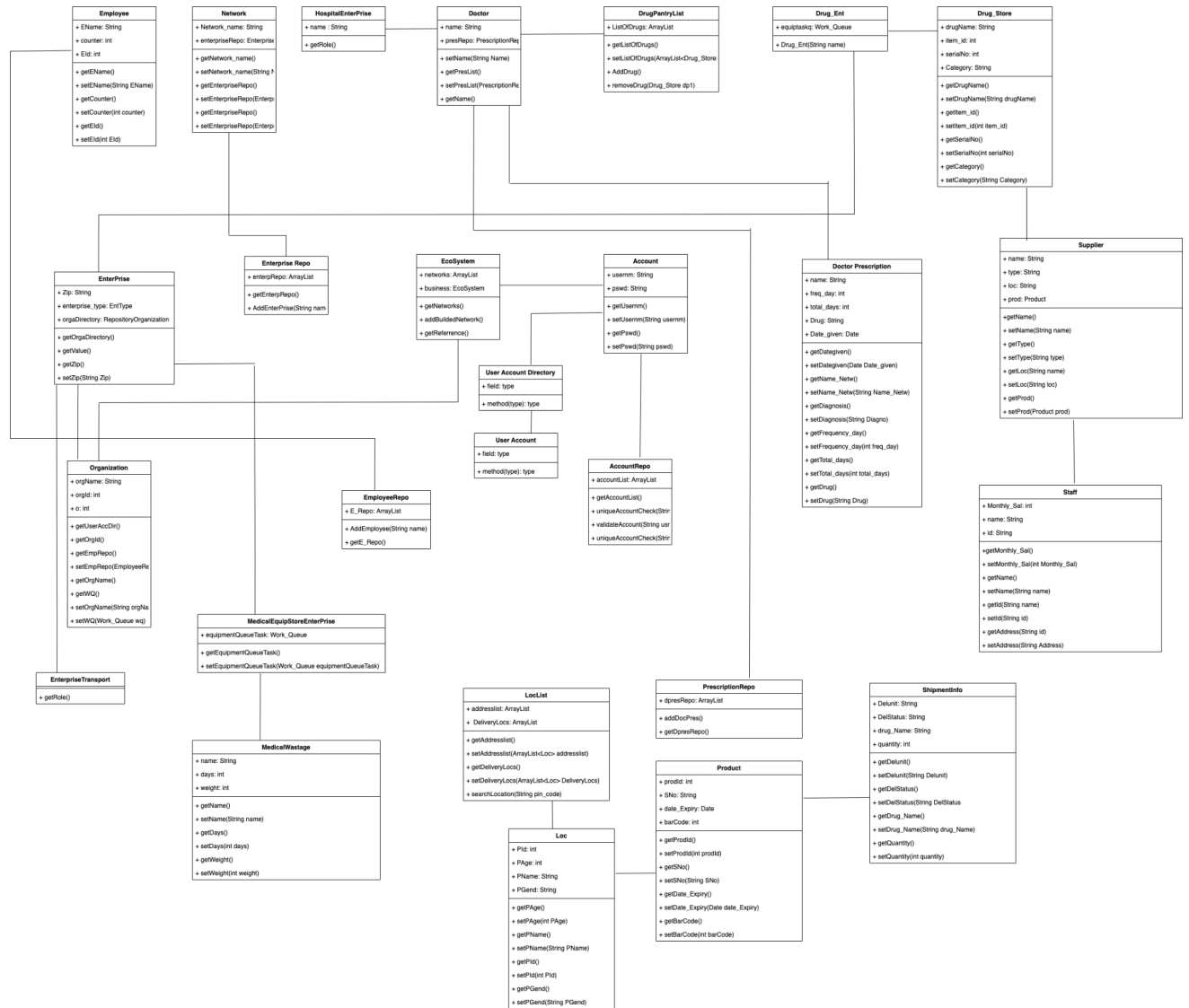
However, different areas are impacted with different severity, and experience their peaks in infected patients at different times. Therefore, while some hospitals are nearing capacity or running out of resources, other hospitals and healthcare providers may have excess capacity or resources that they could share.

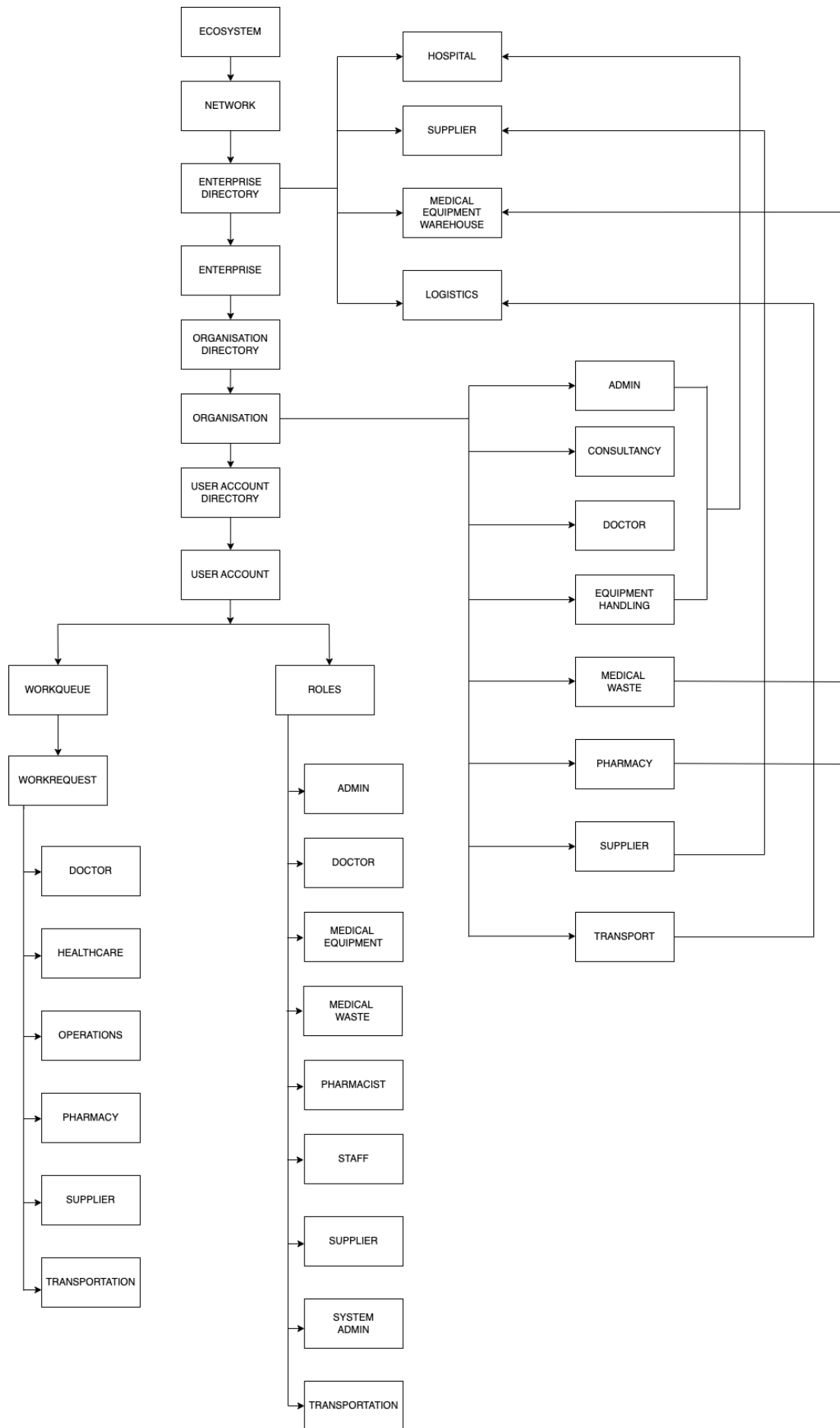
We are proposing a system to take advantage of any excess resources or capacity by optimally re-distributing resources and patients.

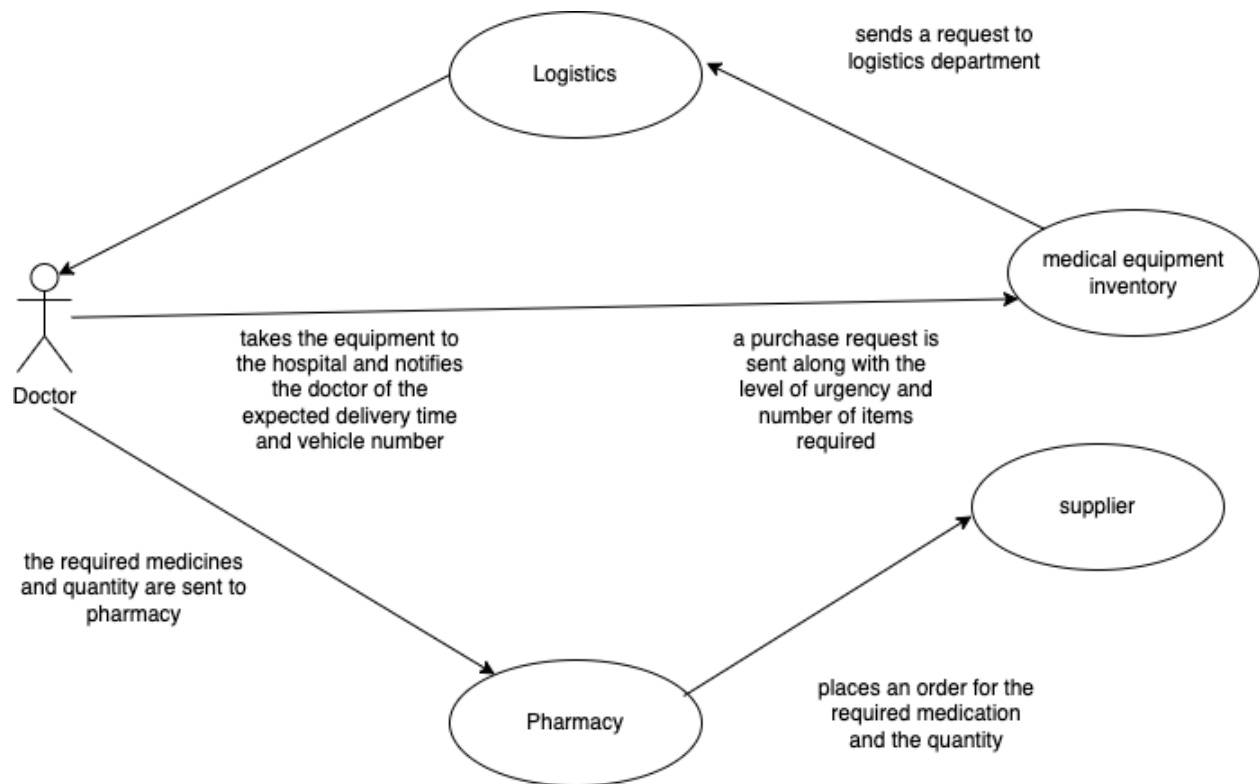
Our Approach is to:

- To create an unified platform that enables direct communication between producers and distributors of legal drugs and healthcare professionals.
- To provide a central platform that enables medical facilities to order any device they might need from other facilities that have it in store and can send it quickly and accurately.
- Hospitals keep track of their inventory in order to anticipate future demands, acquire products from suppliers, and try to replace critical pieces of equipment.

Diagrams:







Enterprise Admin Sequence Diagram

