CS 319- Daily Planet: Medical Inventory Management Application

Name of team members & their department affiliation:
Lhamo Tsering (Management) 11/12/2017
Innocencia Miller (Management) 11/12/2017
Ziyad Moussa (Computer Science) 11/12/2017
Abdullah Hashmi (Computer Science) 11/12/2017
Joseph Conteh (Computer Science) 11/12/2017

Faculty Advisor: Dr. Robert Dahlberg
Abstract:

Daily Planet is a nonprofit clinic located in Richmond, Virginia. Daily Planet is currently facing numerous challenges dealing with the unexpected shortages or overstock of medical supplies. In order to resolve the inventory concerns of Daily Planet, we are currently developing an inventory management application that is compatible with both IOS and Android platforms. The components of the application include a barcode scanner, a central database, a host computer and a smartphone. The application is linked to a central database where all the information and corresponding barcodes will be listed in real time from anywhere with one scan. Once the user downloads the application on their smartphone, it will require the user to register their phone in the database after which the user will gain access to the automated inventory management system. After the user has opened the application, the database will increment or decrement the quantity of the product. When the user places an order for a specific product, a prompt will pop up asking the user to verify the order. Users can choose to either accept or cancel the order. If the user chooses to accept the order, it will proceed with the order and if the user clicks cancel, the order will not proceed. The extra confirmation is necessary to avoid any potential human errors associated with inputting data.

Another important component of this project is the product relevance or popularity. Since some medical supplies have higher priority over others, our application will provide a warning to notify the inventory control administrator if a specific product is low in stock. The main database will be located on a computer in the office of Daily Planet to ensure that problems are dealt when it occurs. The inventory control administrator will have full access to all of the inventory objects in the system, while others users can only view, but cannot modify the inventory objects. This inventory management application can improve the accuracy of orders, increases efficiency and productivity, as well as saves time and money.

We are currently pursuing for Sternheimer award in order to develop and implement our medical inventory management application across nonprofits clinics located in Richmond, Virginia. Since our project is considered a service learning project, we are motivated by social profit rather than monetary gain.
(1 page limit): A line item budget that reflects all expenses related to the completed project

**Line item budget**

- Sternheimer award is necessary for us to ensure the feasibility of the product
- Creating a social impact and benefiting Richmond as a whole
- We are motivated by social profit rather than monetary gain
- Expenses associated with procuring the medical inventory management application:
  - One-time fee of $100 for server subscription and obtaining the developer’s license
  - $99 annually to add it on the app store
- Future opportunities:
  - Purchasing IPads during the expansion