**Example use case diagram for the library administration machine**

The example show primary actors on the left, goals in the middle, and the supporting actors on the right. The primary actors are using the system to fulfill the goals. The supporting actors are helping the system fulfill the goals of the primary actors. In the use case diagram, the supporting actors that are not human beings are represented using a different notation. Although, it is optional to do so, it improves the readability of the diagram. The diagram also shows that more than one actor can fulfill a goal. For example, both the patron and the librarian is able to check out, check in, and pay a fine. The librarian can also fulfill additional goals such as adding a book, reporting a book as stolen, adding a new patron, cancelling the membership of a patron. Showing the system boundary is very important. In this case, if the system boundary was not shown the reader of the use case diagram (often the customer) may confuse that the machine will come with the book record and the patron record. The diagram clearly shows the portion of the system that will be delivered and clarifies that confusion.
Example use case diagram for the patient monitoring machine

The figure below shows the use case diagram for the patient monitoring example. Again the primary actors are shown on the left, goals in the middle, and the supporting actors on the right. In this example, the immediate primary actors are not human beings. However, for clarification, I have shown the human actors (nurse, patient) that are interacting with the system through the immediate primary actors (nurse station, and analog readers).