**A diagram of a system

AI-generated content may be incorrect.**

**Figure 1. Shows actors interacting with the system and AI components.**

1. **Pharmacy Manager**:

* The **Pharmacy Manager** interacts with the system by **reviewing forecasts** produced by the **AI System**. Based on these forecasts, they decide on inventory adjustments, stock replenishment, and promotional activities.

1. **AI System**:

* The **AI System** **generates forecasts** using data processed by the **Data Engineer** and **ML Engineer**. It also plays a crucial role in **optimizing inventory** by suggesting stock levels based on the predicted sales.

1. **Data Engineer**:

* The **Data Engineer** ensures that the necessary data is prepared and formatted for the **AI System**. They handle data cleaning, feature engineering, and ensure the data is ready for machine learning models to process.

1. **ML Engineer**:

* The **ML Engineer** trains the machine learning models using the prepared data. They ensure the models (like **XGBoost** and **LSTM**) are accurately predicting future drug sales and fine-tune the models for optimal performance.