PART 1:

1.0 Update inventory with newly received stock

Add new stock purchased

2.0 Update inventory decrementing for items used

Amount of stock after decrementing for items used

3.0 Generate Orders

Stock falls below threshold value

4.0 Make Payments

Invoice sent from Supplier

Make payment to supplier for inventory

5.0 Reconcile total stock on hand. If below threshold value, generate order.

Supplier

Amount of inventory ordered and paid for

Order sent to Supplier

Inventory database

Stock on Hand

Amount of stock currently on hand

Total stock in inventory database

Amount of stock for item(s) to be purchased.
PART 2:

1.0 Update App with area of interest

2.0 Make call to Crime Service every 10 minutes

3.0 Sort updated crime-related information by area of interest in DC

4.0 Update locations and properties of parking meters and RPP zones near area of interest

5.0 Update App with map of parking, crime, and RPP locations near area of interest

Store selected areas of interest

Crime Service Information Feed

Google Maps API

User

Area of interest in DC

Map of parking, crime, and RPP locations near User's area of interest
PART 3:

Some context: I am a full-time Indiana University employee, and hope to remain with the university following the completion of my MPA. So writing to my future boss in this context is writing to another employee of Indiana University, an institution that has long been committed to developing and adopting open source software.

Dear Supervisor,

Open source software (OSS) has been supported by institutions of higher education from the onset of OSS. These institutions, and Indiana University (IU) specifically, have in turn benefited from the use of OSS acting not only as users of OSS, but also as champions of the development and continued improvement of OSS usage. Just recently in January of this year, Indiana University joined the Open Source Initiative as an affiliate member. The Open Source Initiative is recognized internationally for certifying open source licenses and preventing misuse of OSS. IU joining as an affiliate member further demonstrates their commitment to OSS.

That said, it would behoove us to continue to leverage the benefits of OSS. Take for instance IU’s development of the Kuali Foundation. This partnership stemmed from the university’s need to have results-oriented and streamlined business solutions that served higher education specifically; something that was less expensive and didn’t rely on a third-party administrator. Taking a collaborative, community-based approach, IU set out on a project that eventually became the Kuali Foundation. They later implemented the Kuali Financial System, which has saved IU $20 million dollars. The Kuali Financial System is the result of community-developed OSS. Leveraging the collective technological expertise across a number of institutions, the community was able to create a system that is more efficient and better serves the unique business needs of an institution of higher education. Giving just one example at IU, many employees track their time worked and attendance in Kuali Time and this information is transmitted directly into the payroll system. This is a hugely important administrative process.

This is the very essence of OSS – that is, it allows users to freely customize and disseminate software such that they may create a final product that best suits their needs. As stewards of OSS usage IU is, and must remain, committed to developing and protecting OSS usage. Doing so will ensure continued benefit.