BUILDING OUT THE DFD: INCLUDING LICENSE INFORMATION AND A MANAGER

Professor Germonprez

ISQA 3420

ASSIGNMENT ONE

ISQA 3420 – Managing in a Digital World Assignment 1
Fall 2016 / Germonprez
30 Points / Due: Monday, October 10th, 2016

ASSIGNMENT ONE

Overview:

Managing in a digital world is an exceedingly complex endeavor. In your first assignment, you are responsible for the design documentation in the management of open source software. In the assignment, your perspective should be from within the corporation where you produce design documentation for new systems that help manage the interface between the internal corporation and the external environment. The documents will expose you to a deep understanding of the complexities associated with managing in a digital world, and the level of detail that must be attended to when engaging complex settings. The design documents do not require development or deployment of any system, but they do require a clear understanding of the technical context within which you are operating.

ASSIGNMENT ONE

Deliverables:
- Executive Summary   (5 points)
- Data Flow Diagram   (10 points)
- Data Flow Diagram Dictionary   (5 points)
- Three Use Cases   (5 points)
- Overall GitHub Repository Design and Use   (5 points)

This assignment requires that **all components are** complete. Failure to complete any part of the assignment will result in -5 points for your overall score.

ASSIGNMENT ONE

Executive Summary: The executive summary must be a clearly defined description of the project. This includes the descriptions of why the system is design (motivation), expected changes resulting from the new system (organizational structure and authority and control), and the potential open source communities that would be engaged with to support this project (social responsibility).

Data Flow Diagram: The data flow diagram must be fully representative in design of the system. You must use the format presented in class. The DFD must represent all aspects covered in class including:
1) Developer can submit open source packages and receive responses regarding the open source components, the related open source licenses, and published software vulnerabilities.
2) The results are recorded in an open source software package datastore.
3) A manager or developer can submit a project request (collection of software packages). This project request is set against an open source policy document to highlight software packages that violate license or vulnerability requirements
4) A manager can submit or modify policy documents.

Data Flow Diagram Dictionary: This dictionary defines every component present in your DFD.

Three Use Cases: The use cases describe how people are expected to use the designed system.

Overall GitHub Repository Design and Use: The GitHub repository is expected to be designed in a way that it is simple to navigate and find information. Additionally, you are expected to hit the following:

ASSIGNMENT ONE

Executive Summary: The executive summary must be a clearly defined description of the project. This includes the descriptions of why the system is design (motivation), expected changes resulting from the new system (organizational structure and authority and control), and the potential open source communities that would be engaged with to support this project (social responsibility).

Data Flow Diagram: The data flow diagram must be fully representative in design of the system. You must use the format presented in class. The DFD must represent all aspects covered in class including:
1) Developer can submit open source packages and receive responses regarding the open source components, the related open source licenses, and published software vulnerabilities.
2) The results are recorded in an open source software package datastore.
3) A manager or developer can submit a project request (collection of software packages). This project request is set against an open source policy document to highlight software packages that violate license or vulnerability requirements
4) A manager can submit or modify policy documents.

Data Flow Diagram Dictionary: This dictionary defines every component present in your DFD.

Three Use Cases: The use cases describe how people are expected to use the designed system.

Overall GitHub Repository Design and Use: The GitHub repository is expected to be designed in a way that it is simple to navigate and find information. Additionally, you are expected to hit the following:

Commits: You must have +40 commits in your repository over the course of the project
Issues: You must have +20 closed issues in your repository over the course of the project

Note: I will explore the commits and issues in your repository. If your commits and issues are assembled in the last few days, I will deduct 'use' points. It is expected that you are using your repository over the course the assignment. We have been working in class and I'm happy to provide feedback (even contributing to your issue count) over the course of the project. Use GH as your primary work environment.
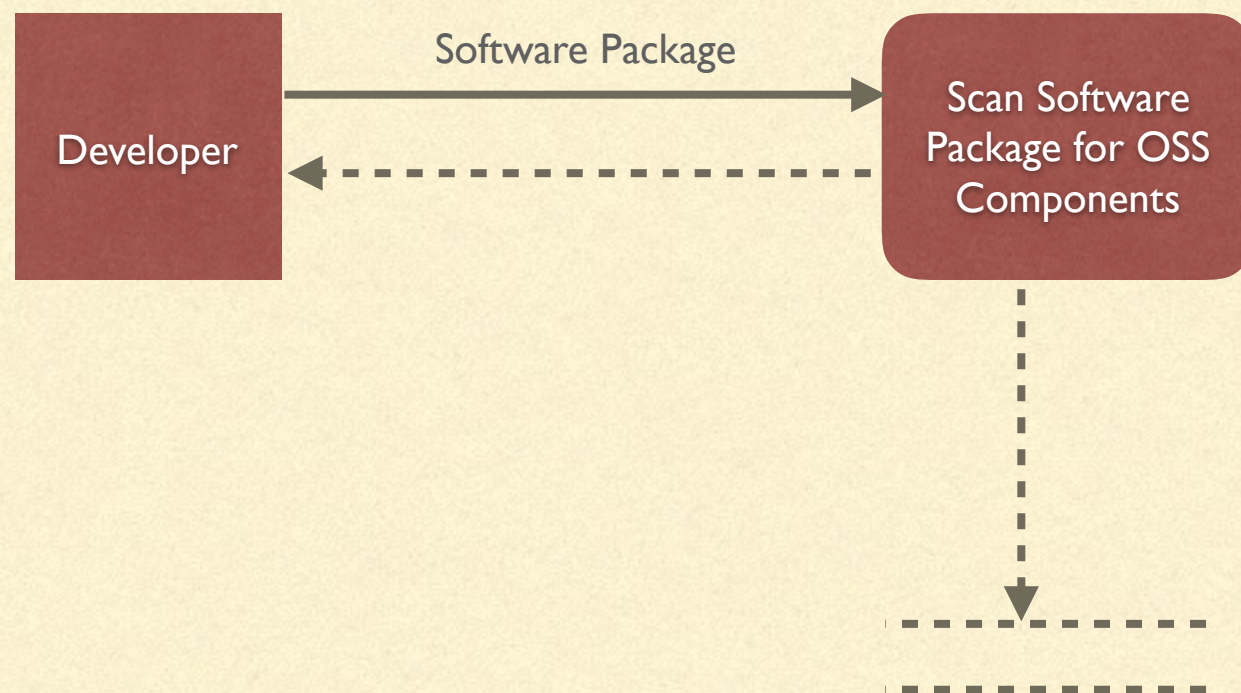
ASSIGNMENT ONE

Questions? Don't hesitate to ask me.

YOU HAVE A DFD TO THIS POINT

Developer

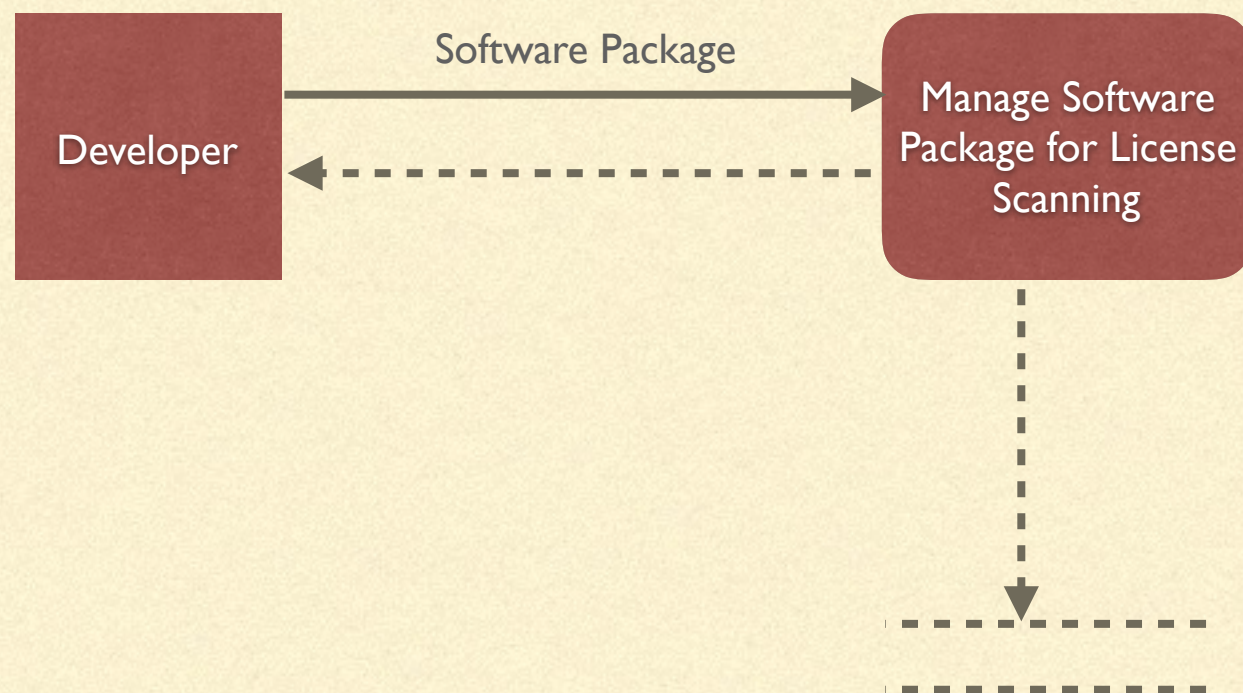Software Package

Scan Software Package for OSS Components

YOU HAVE A DFD TO THIS POINT

YOU HAVE A DFD TO THIS POINT
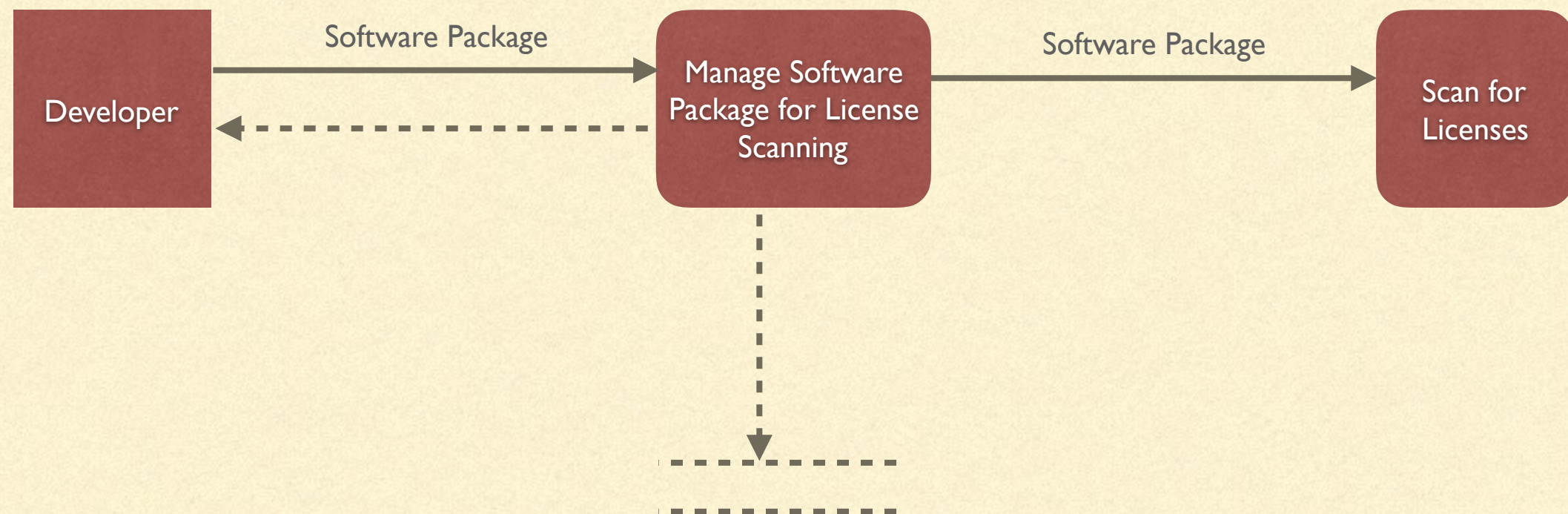
YOU HAVE A DFD TO THIS POINT

WHAT IF WE ADD A MANAGER?

Developer → Software Package → Manage Software Package for License Scanning → Software Package → Scan for Licenses

Scan for Licenses → Software Package License Results → Manage Software Package for License Scanning → Developer
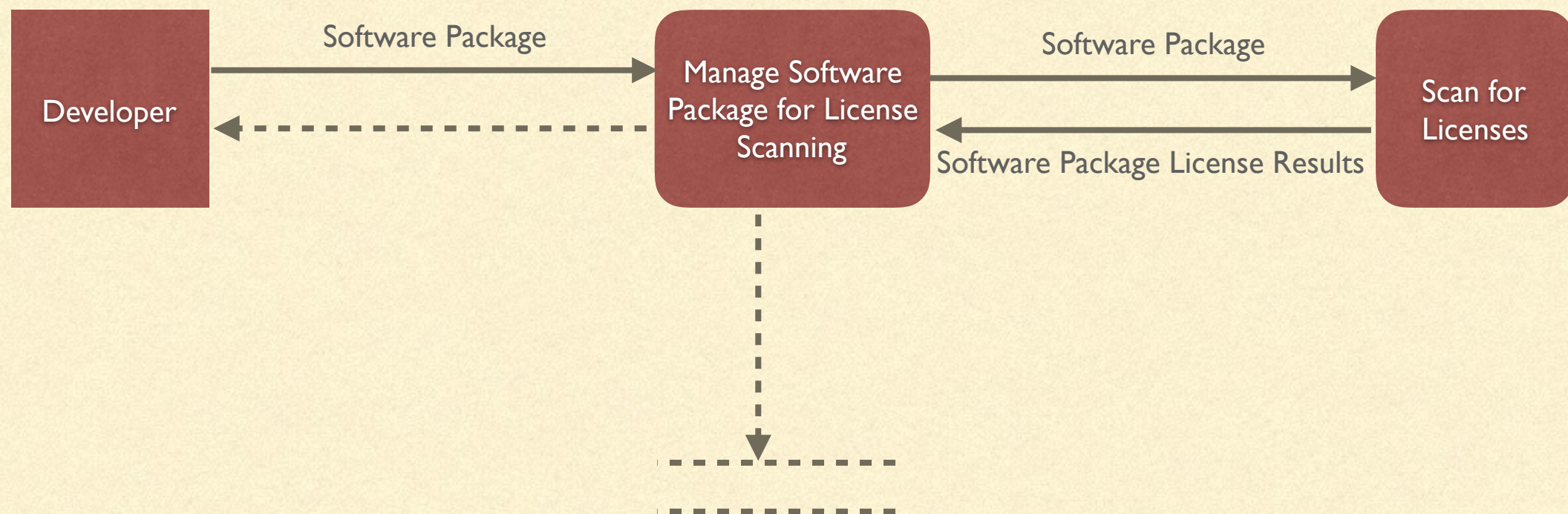
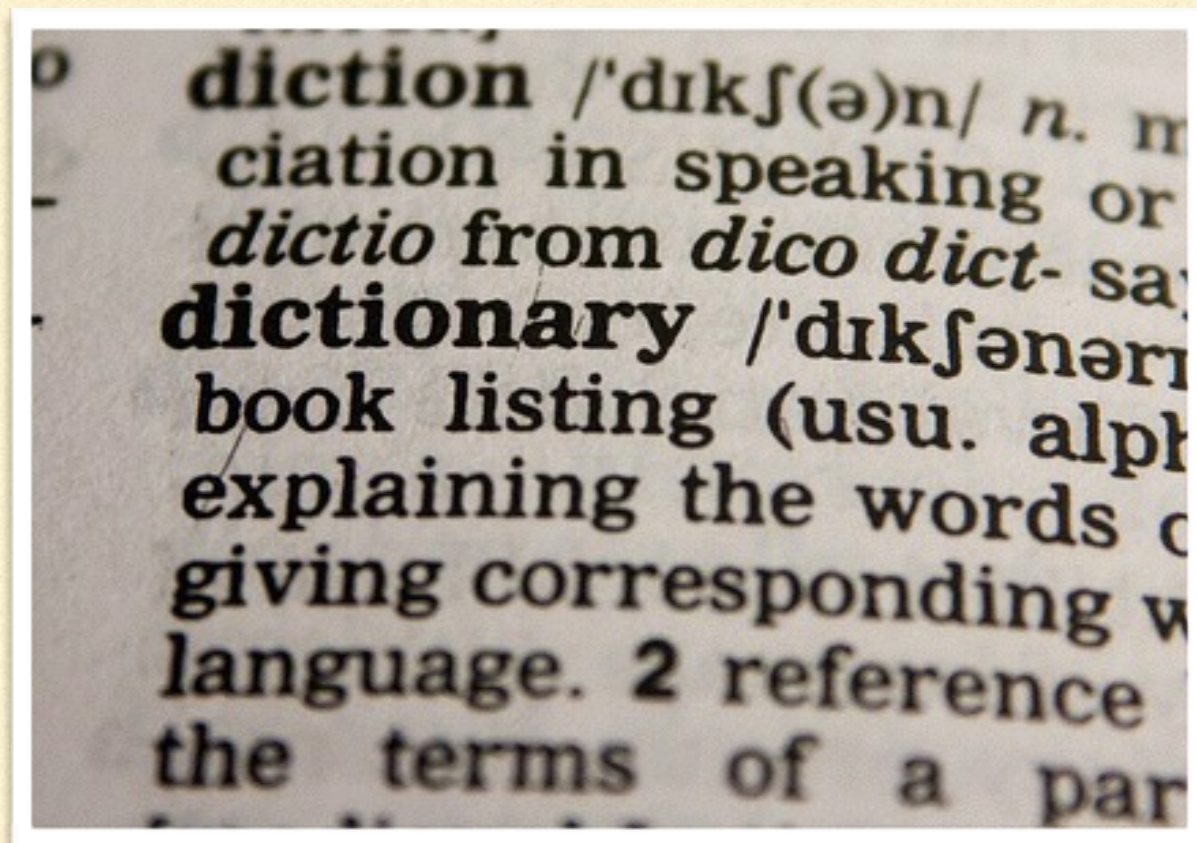The Manager Want to Browse Results → Manager
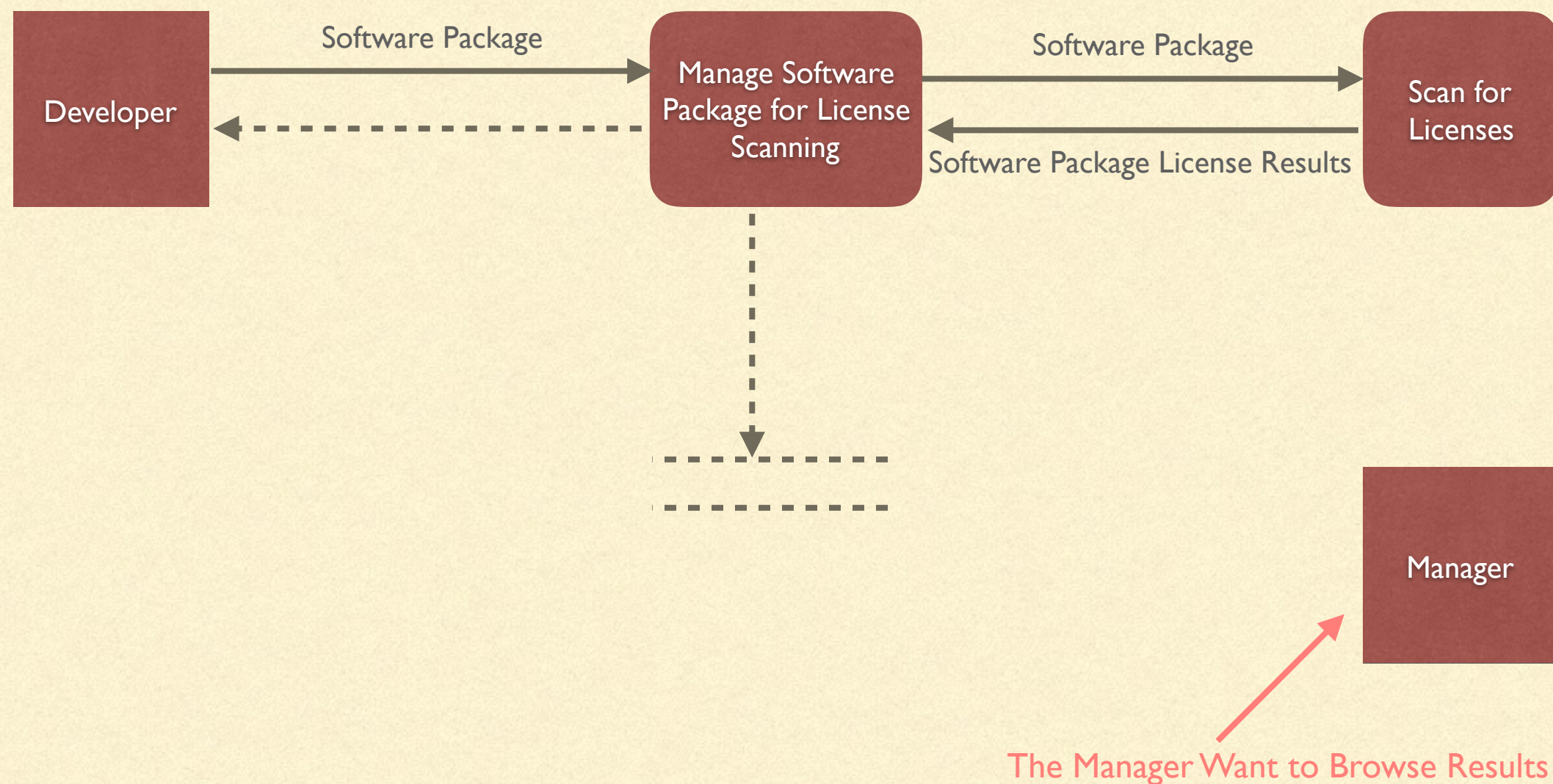
NOTES ON ADDING THE MANAGER

- External entities do not interact directly with databases

- External entities do not interact with other external entities

START YOUR DFD DICTIONARY

- Developer:

- Manager:

- Software Package:

- Etc.

LET ME TAKE A LOOK

- I would love to take a look at your DFD (including the manager)

  - This has to be in the DFD.md file (otherwise I won't look at it).

- I would also love to take a look at your DFD Dictionary

- I'll even add issues to your repository! This is a good thing.

- I'll take a look at anyone's DFD. Just send me an email with a link to your repository.

HAVE A GREAT WEEKEND!!