

MANAGEMENT PRINCIPLES: OPEN SOURCE

PROFESSOR GERMONPREZ

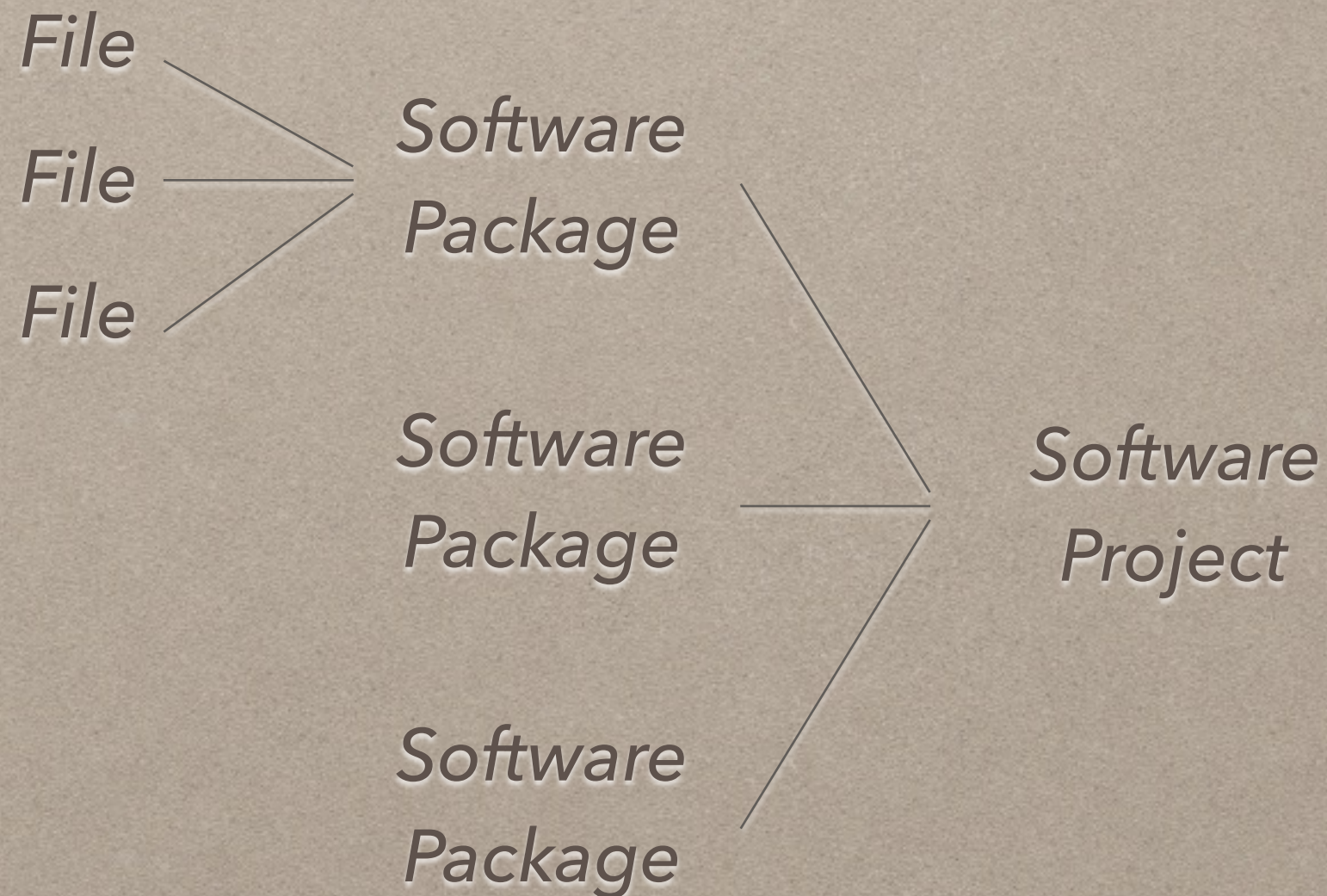
ASSIGNMENT 1: DUE 10/10

- 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.



SOFTWARE PROJECT

A manager or developer can submit a project request (collection of software packages).



CURRENTLY

- In the majority of DFDs, the Manager is requesting All the Software Package License and Vulnerability Information
- This was fine up until now
- With the software package, you are not requesting all, you are requesting software project information. You will have to make this change in your DFD (and perhaps your corresponding Use Case)
 - This should only change your DFD at the level of the data flow (and maybe a process).
 - This will also now include the Developer as able to request this information

POLICY

This project request is set against an open source policy document to highlight software packages that violate license or vulnerability requirements



THE INCLUSION OF POLICY

- There must be a policy datastore
 - It is in this policy datastore that we would keep corporate policy as to what are acceptable licenses and vulnerability thresholds
- There must be a process to connect to that datastore
 - The Manager and the Developer are the people who will connect to the process to get the associated policy

SAMPLE POLICY DOCUMENT

- Green Light Licenses
 - MIT, BSD
- Yellow Light Licenses
 - LGPL, GPLv2, Apache
- Red Light Licenses
 - Affero GPL, GPLv3
- Acceptable Vulnerability Scores
 - CVSS < 6.0 for internal use
 - CVSS < 3.0 for external use

This project request is set against an open source policy document to highlight software packages that violate license or vulnerability requirements

*Software Package License
and Vulnerability Datastore*



Manager

Developer

*Software Package License
and Vulnerability Policy Datastore*



you are responsible for this

A manager can submit or modify policy documents.

*Software Package License
and Vulnerability Datastore*



Manager

*Software Package License
and Vulnerability Policy Datastore*



you are responsible for this too

*submitting and modifying policy documents will be the same
datastore, perhaps the same process, and certainly new data flows*

USE CASES

- You now have three use cases!
- And, that is the end of the DFD.



MANAGEMENT PRINCIPLES: MOTIVATION

- Motivation is directly tied to your executive summary in your GH repo.
- Why are we doing this?
 - To design a system that aids in software project license and vulnerability detection
 - To design a system by which identified software project license and vulnerability information can be compared against corporate policy
- Executive Summary: Tell me what the system is doing. 1-2 paragraphs.



MANAGEMENT PRINCIPLES: ORGANIZATIONAL STRUCTURE

- This is fundamentally embedded in your DFD.
- Your DFD represents a completely new structure in your organization



MANAGEMENT PRINCIPLES: AUTHORITY AND CONTROL

- New tasks have been assigned to both the Developer and the Manager.
- These are the individuals who have (new) authority and control over the new organizational structure



MANAGEMENT PRINCIPLES: SOCIAL RESPONSIBILITY

- Access to large scale, global software projects that would not otherwise be available through proprietary software





 **Hospital**Run

Open source software for
developing world hospitals.

[View demo](#)

[View source on GitHub](#)



EXCLUSIVE

THE DENVER
CHANNEL.COM

3D PRINTERS USED TO MAKE ORGANS & TISSUES

MANAGEMENT PRINCIPLES: SOCIAL RESPONSIBILITY

- Not something we have addressed directly in our repository work.
 - Licenses carry a legal responsibility
 - Is that social?
 - Some would say that it is. Copyleft licenses create an environment of openness, particularly with respect to maintaining open source software as open



MANAGEMENT PRINCIPLES: SOCIAL RESPONSIBILITY

- By requiring users of GPL software to release their source under the same conditions, there is a guarantee that access to software source remains a human right.



<https://www.youtube.com/watch?v=nFZGpES-St8>



WHAT ARE YOUR THOUGHTS ON THE SOCIAL RESPONSIBILITY OF OSS - PARTICULARLY KAREN'S TALK?

*Post your thoughts to the Discussion Board
(Wednesday the 28th – Open Until Friday the 30th)*

**"Keep working on your repos and have a
great weekend"**

-Matt Germonprez