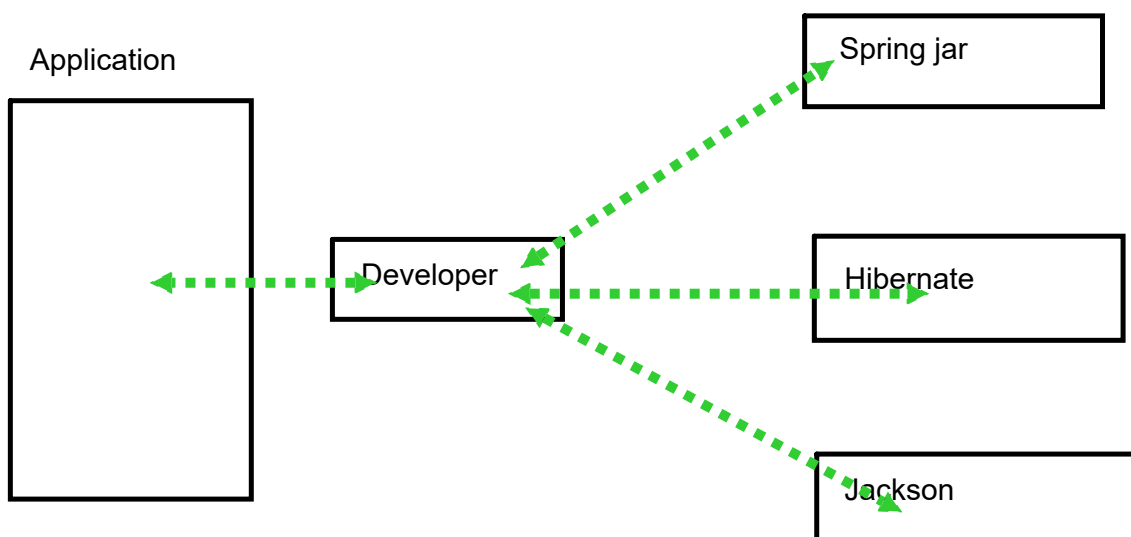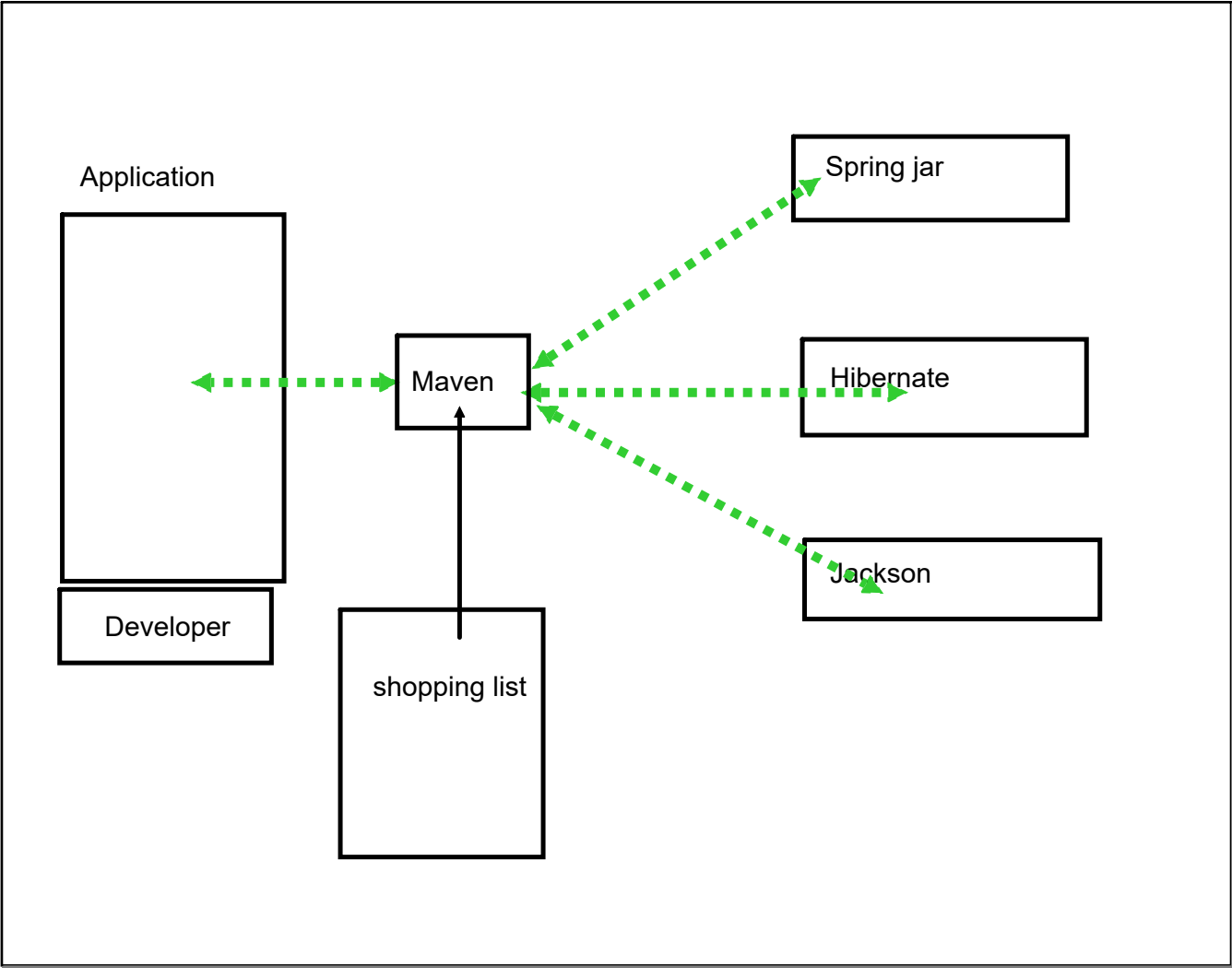Maven Tool:

    Project management  tool
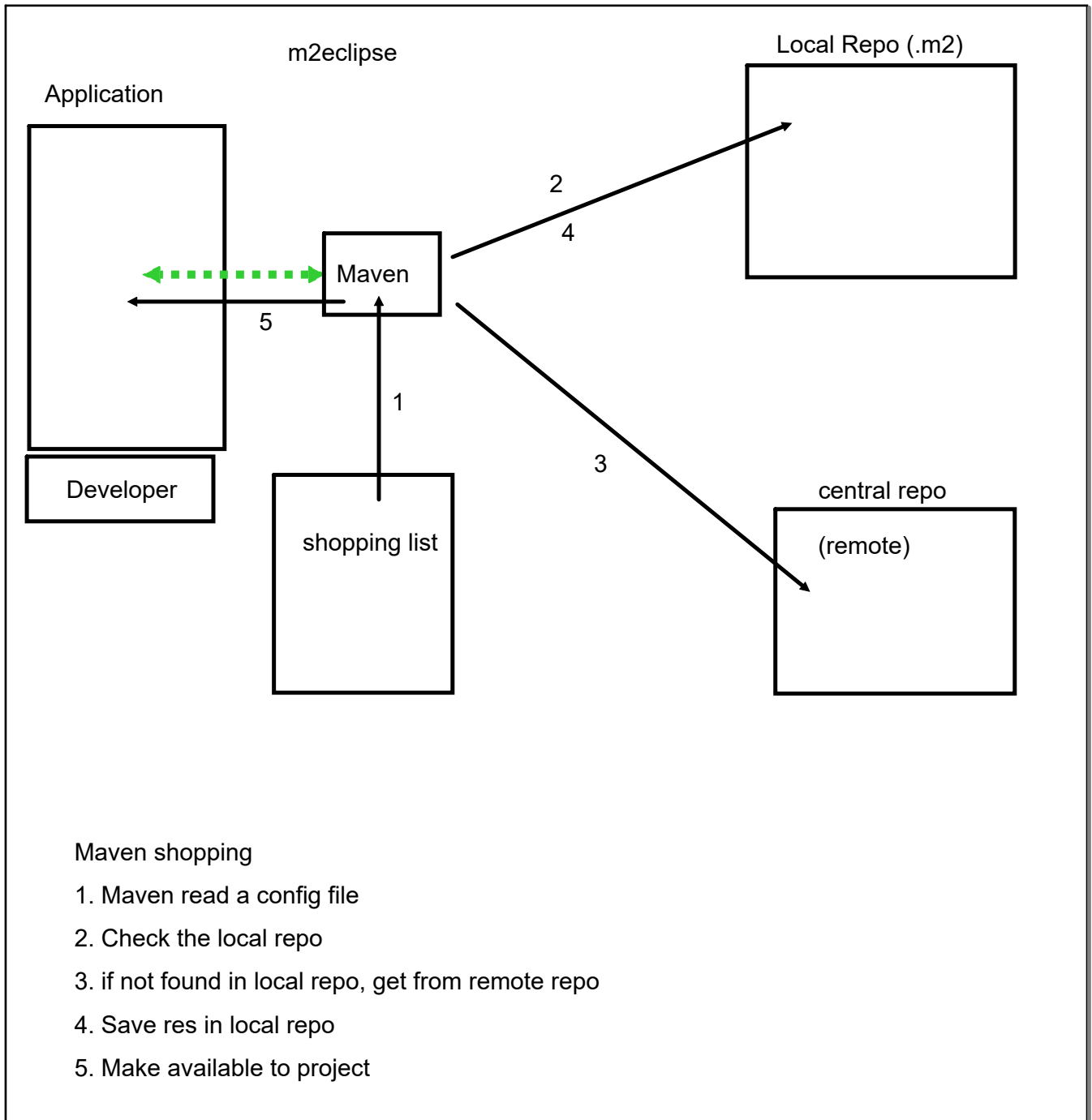
 # used for build management : project structuring and dependency management

dependency :

# Traditional : Developer to download api, integrate, set build path , manage the supporting dependency / version

Application

Spring jar

Developer

Hibernate

Jackson

m2eclipse

Local Repo (.m2)

Application

Maven

2

4

5

1

Developer

shopping list

3

central repo

(remote)

Maven shopping

1. Maven read a config file

2. Check the local repo

3. if not found in local repo, get from remote repo

4. Save res in local repo

5. Make available to project

Project Structure

    a standard industry tested structure templates

    # helps new person to join  team

    # support all major IDEs


eg:

maven web app

    src/main/java : java source file

    src/main/resources : Properties/config

    src/main/webapp : web assets


src/test : Unit testing

target : Home for compiled code

Shopping list : ( config file)

POM file : pom.xml

structure of pom.xml

 4 major section

 => Describe the current project: project name, version, output  : jar/war

 => Properties : Runtime env setting : eg : which jvm version

 => Dependency : List of projects we depend on

 => custom config  : generate of unit test reports, plugins

Project Coordinates ( GAV coordinates)

  Maven need these coordinates to identify the res

<groupId>org.springframework</groupId>

<artifctId>spring-context</artifctId>

<version>5.0.0.RELEASE</version>


Group Id : name of company, group, organisation to which project belongs to

ArtifactId : Name of project eg spring.web-mvc

Version : specific version  (optional)

Configuring web mvc maven project

    1. by default archetype uses JRE 1.5 : need to update to use 1.8

    2. need to server runtime : Properties : Buildpath : add server runtime


Configure for spring mvc support (pure java config)

    1. add dependency

        # spring mvc framework

        # support for dispatcher servlet (servlet-api)

        # jsp-jstl support : servlet.jsp-api

    2. remove web.xml

        #error : web.xml describes war packaging

        need to give responsibility to maven

    need to ad maven-war-plugin

    3. Error related to dynamic web module

        Properties: project-facets : Dynamic web module : 4.0

        else : need to update the config files