**Package Manager**s

A package manager so you can download and share application code.

* + .NET: [NuGet](https://www.nuget.org/downloads)
  + Node.js: [npm](https://www.npmjs.com/package/npm" \t "_blank)
  + Python: [pip](https://pypi.org/project/pip/)
  + Java: [Gradle](https://gradle.org/install/) or [Maven](https://maven.apache.org/download.cgi)

# Package versus an API

Api(Application Programming Interface) Is a type of module that is already scripted. You only need to put it in your script file and use it as you want.

Api example -> Let suppose you want to access laptop camera and it requires an api to access camera. You will have to buy api that allow us to access laptop camera.

Package (More than one modules) Is like a bunch of APIs. This bunch contains many modules/apis. So you are allowed to use each module/api in that bunch as you want.

Package example -> Let suppose you want to access laptop camera and it requires an api to access camera. You will have to buy api that allow us to access laptop camera but there is a package that is a bit expensive than api which contains more than one api that allow us to access laptop camera, and also laptop audio.

A package is a bit expensive than an api but package contains more items than a single api.

Java contains many libraries in those packages (Swing, etc.), and the API is the interface by which we request services (perform actions, etc.). The API (Application Programming Interface) is **what a library looks like from the outside for a program that's using it**.

# Using Java models in Python

Py4J enables Python programs running in a Python interpreter to dynamically access Java objects in a Java Virtual Machine. Methods are called as if the Java objects resided in the Python interpreter and Java collections can be accessed through standard Python collection methods.

As for Python and Java specifically, these two languages actually complement each other. You could for example use one for typical subtasks, while using the other as a scripting language for expanding the customization of the application you’re developing.