

	Library	Package	Framework	Plugin
Definition	Collection of reusable code focuses on specific task	Collection of related code, resources, and documentation bundled together	Comprehensive, provides full application structure	Add-on component that extends existing software functionality
Control Flow	You can call a library	You call the package	High integration effort, hard to replace	System calls the plugin
Scope	Focused on specific tasks	Broader than library, can contain multiple libraries	Low flexibility, must follow framework rules	Specific feature extension
Integration	Easy to integrate and replace	Moderate integration effort	High integration effort, hard to replace	Modular, typically plug-and-play
Flexibility	High flexibility: you control how to use it	Moderate flexibility	Low flexibility, must follow framework rules	Moderate flexibility within plugin interface
Examples	JQuery / Numpy / OpenGL	Npm packages Pip packages NuGet packages	Angular, Django, Spring	Browser extensions, Photo filters
Purpose	Solve specific problem	Provide complete solution for a domain	Provide application foundation	Extend existing functionality
Dependencies	Minimal	Moderate	High	Varies
Learning Curve	Low	Low to Moderate	High	Low to Moderate
Coupling	Loose coupling	Moderate coupling	Tight coupling	Loose coupling