| **Feature** | **Library** | **Framework** | **Package** | **Plugin** |
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| **Definition** | **A collection of reusable code, functions, or classes to simplify development.** | **A structured collection of libraries, components, and tools that provide a foundation for developing applications.** | **A bundle of code (often a library) that can be installed and used in projects.** | **An add-on that extends the functionality of an application or framework.** |
| **Control Flow** | **The developer calls the library’s functions as needed.** | **The framework dictates the flow and calls the developer’s code (Inversion of Control - IoC).** | **Used within projects like a library but can be a collection of libraries or modules.** | **Enhances or modifies the behavior of an existing software system.** |
| **Dependency** | **Self-contained but used inside other programs.** | **Defines the architecture; programs are built around it.** | **Installed as a dependency and managed by package managers.** | **Works within an application or framework, adding optional functionality.** |
| **Examples** | **jQuery, NumPy, React.js (UI Library)** | **Angular, Django, Spring Boot** | **npm packages, PyPI modules, Maven artifacts** | **WordPress plugins, VS Code extensions** |
| **Usage** | **Provides specific functionality, e.g., handling dates, making HTTP requests.** | **Offers a complete workflow structure for application development.** | **Manages dependencies and modular code distribution.** | **Customizes or extends the behavior of an existing tool or application.** |
| **Flexibility** | **High—can be used anywhere in the code.** | **Low—must follow its architecture.** | **Medium—used as a dependency but can be replaced.** | **Medium—depends on host application compatibility.** |
| **Installation** | **Usually imported via package managers or manually added.** | **Installed as a complete setup; needs configuration.** | **Installed through dependency managers like npm, pip, Maven.** | **Installed via an application or framework's extension system.** |