

Theory Topics

Technology is the overall process of invention, innovation, and diffusion of technology or processes.
OR

Technology is the collection of techniques, skills, methods, and processes used in the production of goods or services or in the accomplishment of objectives

Platform is an environment that facilitates to build concerned software applications.

Hardware Platform, includes the platform you are using to build/develop the application program such as developers' machine and targeted hardware on which program will be installed on.

Software Platform, includes the software environment which is used to build/develop the application program such as the developer's machine OS and IDE.

Framework is a generic structure that provides a skeleton architecture/sketch with which specific software can be implemented

Integrated Development Environment (IDE) is an application that helps you during the process of writing the code itself by automating many useful processes. build automation tools and a debugger.

Integrated Development & Learning Environment (IDLE) is an application that helps you during the process of writing the code itself by automating many useful processes. for Python.

API (Application Programming Interface), allows an application to interact with an external service using a simple set of commands.

Software Development Kit (SDK) is a collection of software development tools for a specific platform. It is a set of robust features and functionalities which reduce the complexity of developing programs and applications. This can include all sorts of things such as Libraries, Code Samples, APIs, IDE's, Documentation, and other utilities. They facilitate the creation of applications by having a compiler, debugger and perhaps a software framework. They are normally specific to a hardware platform and operating system combination.

A **package** is a unit of distribution that can contain a library or module, program or any combination of them. Also, it could be a complete software application. It's a way to share your code or software with the community. a package is **a single container containing one or more items that help make up the overall package.**
like the **Microsoft Office package.**

A **Module** is a group of functions, types, and classes that comes under a common namespace.

A **library** is a set of functions that makes sense to be together and that can be used in a program or another library.

=====