What is framework?

In computer systems, a framework is often a layered structure indicating what kind of programs can or should be built and how they would interrelate.

The layers of an operating system; the layers of an application subsystem; how communication should be standardized at some level of a network.

purpose Framework?

The purpose of a framework is to improve the efficiency of creating new software.  Frameworks can improve developer productivity and improve the quality, reliability and robustness of new software.  Developer productivity is improved by allowing developers to focus on the unique requirements of their application instead of spending time on application infrastructure.

 a framework may include predefined [classes](http://techterms.com/definition/class) and [functions](http://techterms.com/definition/function) that can be used to process [input](http://techterms.com/definition/input), manage hardware devices, and interact with [system software](http://techterms.com/definition/systemsoftware)

library?

**(1)** A collection of [files](http://www.webopedia.com/TERM/F/file.html).

**(2)** In [programming](http://www.webopedia.com/TERM/P/program.html), a library is a collection of pre[compiled](http://www.webopedia.com/TERM/C/compile.html) [routines](http://www.webopedia.com/TERM/R/routine.html) that a program can use. The routines, sometimes called [*modules*](http://www.webopedia.com/TERM/M/module.html), are [stored](http://www.webopedia.com/TERM/S/store.html) in [object](http://www.webopedia.com/TERM/O/object.html) [format](http://www.webopedia.com/TERM/F/format.html). Libraries are particularly useful for storing frequently used routines because you do not need to explicitly [link](http://www.webopedia.com/TERM/L/link.html) them to every program that uses them. The [linker](http://www.webopedia.com/TERM/L/linker.html) automatically looks in libraries for routines that it does not find elsewhere.

((linker- a linker is a [program](http://www.webopedia.com/TERM/P/program.html) that combines object [modules](http://www.webopedia.com/TERM/M/module.html) to form an executable program))

**a library** - a collection of functions which are useful when writing web apps. Your code is in charge and it calls into the library when it sees fit

api?

***A***pplication***p***rogram***i***nterface(**API**) is a set of [routines](http://www.webopedia.com/TERM/R/routine.html), [protocols](http://www.webopedia.com/TERM/P/protocol.html), and tools for building [software applications](http://www.webopedia.com/TERM/A/application.html). An API specifies how software components should interact. Additionally, APIs are used when programming graphical user interface ([GUI](http://www.webopedia.com/TERM/G/Graphical_User_Interface_GUI.html)) components. A good API makes it easier to develop a [program](http://www.webopedia.com/TERM/P/program.html) by providing all the building blocks. A [programmer](http://www.webopedia.com/TERM/P/programmer.html) then puts the blocks together.

Library vs framework?

I always thought of a library as a set of objects and functions that is focused around solving a particular problem or around a specific area of application development (i.e. database access); a framework on the other hand is a collection of libraries centered around a particular methodology (i.e. MVC) and covers all areas of application development.

Example framework of html:

Angularjs , react, backbone, ember.

Template?

A template is a file that serves as a starting point for a new document. When you open a template, it is pre-formatted in some way. For example, you might use template in Microsoft Word that is formatted as a business letter.

Angulrajs:

**AngularJS** (commonly referred to as "**Angular**" or "**Angular.js**") is a complete JavaScript-based [open-source](https://en.wikipedia.org/wiki/Open-source_software) front-end [web application framework](https://en.wikipedia.org/wiki/Web_application_framework) mainly maintained by [Google](https://en.wikipedia.org/wiki/Google) and by a community of individuals and corporations to address many of the challenges encountered in developing [single-page applications](https://en.wikipedia.org/wiki/Single-page_application). The JavaScript components complement [Apache Cordova](https://en.wikipedia.org/wiki/Apache_Cordova), the framework used for developing cross-platform mobile apps. It aims to simplify both the development and the [testing](https://en.wikipedia.org/wiki/Software_testing) of such applications by providing a framework for client-side [model–view–controller](https://en.wikipedia.org/wiki/Model%E2%80%93view%E2%80%93controller) (MVC) and [model–view–viewmodel](https://en.wikipedia.org/wiki/Model_View_ViewModel) (MVVM) architectures, along with components commonly used in [rich Internet applications](https://en.wikipedia.org/wiki/Rich_Internet_application).