

## **\*HOOK\***

A hook is a place and usually an interface provided in packaged code that allows a programmer to insert customized programming.

It's the chance that code gives you to change the original behavior of something without changing your code of the corresponding class. This is done by overwriting the hook methods.

This type of implementation is very useful in the case of adding new functionalities to applications, also facilitating the communication between the other processes and messages of the system. Hooks tend to decrease system performance by increasing the processing load that the system needs to perform for each message.

## **\*WEBHOOK\***

Webhooks are events that trigger an action. They are used for communication between systems. This is the simplest way of getting an alert when something happens in another system. They are called webhooks because they work as software hooks over the web.

A webhook is a HTTP callback: a HTTP POST that occurs when something happens – an event-notification via HTTP POST. Webhooks are used for real time notifications, so your system can be updated right when the event takes place.

## **\*URI - URL - URN\***

**URI** stands for Uniform Resource Identifier. URI is a text which is used to identify any resource or name on Internet. URI has two specializations in the form of URL (Uniform Resource Locator) and URN (Uniform Resource Name) to identify resource and name.

It's defined to be an ASCII string used to identify things on the Semantic Web.

**URL** standards for Uniform resource locator and it is a subset of URI or Uniform Resource Identifier. URL includes location as well as the protocol to retrieve the resource.

It's defined as the global address of documents and other resources on the World Wide Web.

**URN** Uniform Resource Name. An URI that uses the urn scheme, it complements URL's for ID in particular namespaces.

URN is also the subset of URI, is a subset of URIs that include a name within a given space, but no location. Is simply a unique name.

## **DIFFERENCES**

The main difference between URI and URL is that every URL is a URI but not vice versa. Similarly, every URN is a URI, but the opposite is not true. Another difference between URI and URL is that URL includes the protocol, which is key to retrieving information from any location. Here are few differences between URI, URL and URN in point format:

- 1) Every URL and URN is URI because URI is the superset of both URL and URN.
- 2) URL includes protocol e.g. `http://`, `ftp://` along with location to identify resource e.g. `http://www.blogspot.com/abc.html`.
- 3) URN is the unambiguous way to identify a resource. ISBN numbers are best examples of URN.

## **\*CALLBACK\***

A callback is a function that is to be executed after another function has finished executing. It's a Code passed as an argument to other code that is expected to execute the argument at a given time.

A callback, also known as a "call-after"[1] function, is any executable code that is passed as an argument to other code that is expected to call back (execute) the argument at a given time. This execution may be immediate as in a synchronous callback, or it might happen at a later time as in an asynchronous callback.