**What is Logging?**

**Logging**

In computing, a **logfile** is a **file** that records either events that occur in an operating system or in a programme or when a software runs.

**Logging** is the act of keeping a **log.**

Or we can say, logging is a method of tracking/monitoring what is going on when an application is running. Log records will be the most needed items when something goes wrong in your application.

Now I am explaing Log4Net.

**LOG4NET**

Log4net is an open-source library that allows or helps the .NET applications to trace the details of the errors that have occurred in a project.

Log4Net is a framework for implementing logging mechanisms. It is an open source framework.

Log4net provides a simple mechanism for logging information to a variety of sources. Information is logged via one or more loggers. These loggers are provided at the below levels of logging:

* Debug
* Information
* Warnings
* Error
* Fatal

**APPENDER: The <appender /> element specifies the name and logger type. It specifies where the information will be logged, how it will be logged and under what circumstances the information will be logged. You can check the various types of appender in the link**[**http://logging.apache.org/log4net/release/config-examples.html.**](http://logging.apache.org/log4net/release/config-examples.html)

**param name:** specifies the file name and path where the log will be saved. In this case it is "test.log".

**layout:**The Layout element tells Log4Net how each log line should look like.

**Root: You need to have one root section to house your top-level logger references. These are the loggers that inherit information from your base logger (root).**

<log4net>

<!-- appenders go here -->

<root>

<level value="INFO" />

<appender-ref ref="myLogAppender" />

</root>

<logger name="MyNamespace.Foo.Bar">

<level value="DEBUG" />

</logger>

</log4net>