



Software Maintenance

Topu Newaj, EVP Kona Software Lab



What is Software Maintenance?

Software maintenance is the process of changing, modifying, and updating software to keep up with customer needs. Software maintenance is done after the product has launched for several reasons including improving the software overall, correcting issues or bugs, to boost performance, and more.



Types of software maintenance

Corrective Software Maintenance

Preventive Software Maintenance

Perfective Software Maintenance

Adaptive Software Maintenance



Corrective Software Maintenance

Corrective software maintenance is the typical, classic form of maintenance (for software and anything else for that matter). Corrective software maintenance is necessary when something goes wrong in a piece of software including faults and errors. These can have a widespread impact on the functionality of the software in general and therefore must be addressed as quickly as possible.



Preventive Software Maintenance

Preventive software maintenance is looking into the future so that your software can keep working as desired for as long as possible.

This includes making necessary changes, upgrades, adaptations and more. Preventative software maintenance may address small issues which at the given time may lack significance but may turn into larger problems in the future. These are called latent faults which need to be detected and corrected to make sure that they won't turn into effective faults.



Perfective Software Maintenance

As with any product on the market, once the software is released to the public, new issues and ideas come to the surface. Users may see the need for new features or requirements that they would like to see in the software to make it the best tool available for their needs. This is when perfective software maintenance comes into play.



Adaptive Software Maintenance

Adaptive software maintenance has to do with the changing technologies as well as policies and rules regarding your software. These include operating system changes, cloud storage, hardware, etc. When these changes are performed, your software must adapt in order to properly meet new requirements and continue to run well.



Maintaining the Code

Understanding the code

Structuring the code

Logging

Unit test

Integration Test

API Test Automation

Documentation

Security and Penetration Test



Maintaining the Database

Indexing

Log cleanup

Data replication

Table Partitioning

DB Partitioning

Data Life cycle Management

Data pipeline



Maintaining the Production Environment

Production log maintenance

Configuration Management

Network Management

Security Management

Scalability Management

Alert and Monitoring



Contact

snewaj@gmail.com

+8801819247726 (Whatsapp)