

### **System Maintenance**

Maintenance of a Web application after delivery to correct faults, to improve performance or other attributes.

A common perception of maintenance is that it merely involves fixing defects. However, one study indicated that over 80% of maintenance effort is used for non-corrective actions. This perception is perpetuated by users submitting problem reports that in reality are functionality enhancements to the system. More recent studies put the bug-fixing proportion closer to 21%.

#### **9.1 Requirement of System Maintenance**

The key software maintenance issues are both managerial and technical. Key management issues are: alignment with customer priorities, staffing, which organization does maintenance, estimating costs. Key technical issues are: limited understanding, impact analysis, testing, maintainability measurement.

Software maintenance is a very broad activity that includes error correction, enhancements of capabilities, deletion of obsolete capabilities, and optimization. Because change is inevitable, mechanisms must be developed for evaluation, controlling and making modifications.

So, any work done to change the web application after it is in operation is considered to be maintenance work. The purpose is to preserve the value of software over the time. The value can be enhanced by expanding the customer base, meeting additional requirements, becoming easier to use, more efficient and employing newer technology.

#### **9.2 Maintaining CLMS**

New features can be added to Clinical Laboratory Management System when required as

it is developed using .NET framework which supports Interoperability. So, Clinical Laboratory Management System can be maintained by using the latest version of .NET Framework.