

CHAPTER 1.

THEORETICAL FOUNDATION

1.1 System

According to Wikipedia (www.wikipedia.org), A system is an assemblage of inter-related elements comprising a unified whole. From the Latin and Greek, the term "system" meant to combine, to set up, to place together.

1.2 Information System

According to the National Information Systems Security Glossary, information system is:

1. A system, whether automated or manual, that comprises people, machines, and/or methods organized to collect, process, transmit, and disseminate data that represent user information.
2. Any telecommunications and/or computer related equipment or interconnected system or subsystems of equipment that is used in the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of voice and/or data, and includes software, firmware, and hardware

1.3 Database

According to Wikipedia (www.wikipedia.org), A database is a collection of information stored in a computer in a systematic way, such that a computer program can consult it to answer questions.

1.4 Web

According to Wikipedia (www.wikipedia.org), the Web is an information space in which the items of interest, referred to as resources, are identified by global identifiers called Uniform Resource Identifiers (URI).

1.5 Production Planning

Production Planning, or manufacturing process planning as it is commonly referred to, deals with the task of defining how a new product is made.

This collection of engineering tasks involves

- work assignment and resource requirements
- time and cost estimation
- layout planning
- ergonomics assessment
- quality engineering
- line balancing
- shop floor documentation
- workflow documentation and charting

1.6 Inventory Control

According to Institute for Supply Management (www.ism.ws), inventory control is the management of inventories, including decisions about which items to stock at each location; how much stock to keep on hand at various levels of operation; when to buy; how much to buy; controlling pilferage and damage and managing shortages and back orders.

1.7 PHP

According to David Sklar and Adam Trachtenberg (www.php.net), PHP is a server-side scripting language for creating dynamic Web pages. You create pages with PHP and HTML. When a visitor opens the page, the server processes the PHP commands and then sends the results to the visitor's browser, just as with ASP or ColdFusion. Unlike ASP or ColdFusion, however, PHP is Open Source and cross-platform. PHP runs on Windows NT and many Unix versions, and it can be built as an Apache module and as a binary that can run as a CGI. When built as an

Apache module, PHP is especially lightweight and speedy. Without any process creation overhead, it can return results quickly, but it doesn't require the tuning of `mod_perl` to keep your server's memory image small.

1.8 MySQL

According to Webopedia.com, MySQL is an open source RDBMS that relies on SQL for processing the data in the database. MySQL provides APIs for the languages C, C++, Eiffel, Java, Perl, PHP and Python. In addition, OLE DB and ODBC providers exist for MySQL data connection in the Microsoft environment. A MySQL .NET Native Provider is also available, which allows native MySQL to .NET access without the need for OLE DB.

MySQL is most commonly used for Web applications and for embedded applications and has become a popular alternative to proprietary database systems because of its speed and reliability. MySQL can run on UNIX, Windows and Mac OS.

MySQL is developed, supported and marketed by MySQL AB. The database is available for free under the terms of the GNU General Public License (GPL) or for a fee to those who do not wish to be bound by the terms of the GPL.