

Integrated Development Environment

IDE is an Integrated Development environment which provides comprehensive facilities to computer programmers for software development. An IDE usually consists of at least a source code editor, build automation tools and a debugger.

Console	Client server	Web based	Enterprise
<p>This application is designed to provide a simple user interface for applications requiring little or no user interaction.as samples for learning C# language features and command-line utility programs.</p>	<p>A client/server application is a piece of software that runs on a client computer and makes requests to a remote server.Often such applications are database applications that make database queries to a remote central database server.</p>	<p>A web application is an application software that runs on a web server, unlike computer-based software programs that are stored locally on the Operating Systems of the device.</p>	<p>Enterprise applications are a software solution that provides business logic and tools to model entire business processes for organisations to improve productivity and efficiency.</p>
<p>A computer program designed to be used via a text only computer interface, such as a text terminal.</p>	<p>A software that runs on a client computer and makes requests to a remote server.</p>	<p>A program that is accessed over a network connection using HTTP, rather than existing within a device's memory.</p>	<p>It is a software which involves customer relationships followed by knowledge management to improve efficiency and productivity.</p>
Ex: xterm in unix	Ex: gmail	Ex: Amazon	Ex: marketo

Software Development Life Cycle:

Requirement gathering

Analysis

Designing

Coding

Testing

Deployment

Sdlc cycle of library management system :Client-Server application

Requirement gathering: maintain information about its users and books. Any person should be able to identify a particular book by its title and unique number given to that book.

Should maintain a database for books, students, teachers, others.

Student database must contain the details about a student's pin no, name, phone number, course and course year. The teacher database must contain the details about a teacher's id, name, department, designation, and contact number. Book database must contain the details about book title, book unique number, author, publisher, price, bill number, year of publishing and pages.

availability 24/7; database should have backup and recovery of data; database should be highly security; administrator must have complete access to all the databases.

Software Requirements: Sql, operating system, Programming language.

Hardware Requirements: Processor, Hard disk, RAM.

Analysis: should track details of book - Issue Book; Return Book, List of Books; List of Members, Update/Delete Member, Update/Delete Book, Search For a Book, Check In Book, Check Out Book.

Designing: UML Diagrams, Data Flow Diagrams; which will show the flow of the application.

Coding: preferred language code based on cost, requirement and time.

Testing: includes System testing, Software testing , End-to-End tests, UI testing.

Deployment: application is ready to use ,but only given to librarians (designated members).