



ASE Lab assignment no: 3

TOPIC: Analysis tools, Design tools, Project management tools, Database tools, Documentation tools & Sequence diagram.

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ANALYSIS TOOLS:

Software analysis tools and techniques can help tackle the costly, hard-to-find errors that frustrate and delay development, testing and deployment. They help to identify issues before they cause problems downstream or for the customer

Widespread prevalent analysis tools:

- **Process Street:** Frees regular workflow scheduling
- **Abacus:** There are 9 products & has different price based on its feature
- **Jama:** Jama tool is best for projects with waterfall life cycle.
- **Fog Bugz:** This tool is also used for agile project management

Analysis tool used in our project: Process street.

DEVELOPMENT TOOLS:

software development tool is a computer program that software developers use to create, debug, maintain, or otherwise support other programs and applications.

Widespread prevalent development tools:

- **NetBeans:** Support for fast & smart code editing. It has easy & efficient project Management process. This IDE offers superior support for C/C++ and PHP developers & helps in writing error free code.

- **Cloud9 IDE:** [Cloud9 IDE](#) is an online integrated software development environment. It supports many programming languages like C, C++, PHP, Ruby, Perl, Python, JavaScript and Node.js.
- **Zend Studio:** [Zend Studio](#) allows software developers to code faster, debug more easily. It is next-generation PHP IDE designed to create apps for boosting developers' productivity. It scales according to the DPI settings of the underlying operating system.
- **Visual Studio:** [Visual Studio Online](#) is a collection of services. It is fast and easy to plan, build and ship software across a variety of platforms. These software development tools allow the organization to create the perfect development environment.

Development tool used in our project: Visual Studio 2013.

DESIGNING TOOLS:

Design tools are objects, media, or computer programs, which can be used to **design**. They may influence the process of production, expression and perception of **design** ideas and therefore need to be applied skillfully

Widespread prevalent designing tools:

- **Magic Draw:** Lazy loading allows the specification of modules that should not be loaded into memory by default when a project is started

- **Visual Paradigm:** Visual Paradigm can run flawlessly with Eclipse/NetBeans/IntelliJ IDEA/Visual Studio. This allows you to perform software design and implementation within a unified environment.
- **MS Visio:** It is a diagramming and vector graphics application and is part of the Microsoft Office family.

Designing tool used in our project: MS Visio.

DATABASE TOOLS:

Database software is the phrase used to describe any software that is designed for creating databases and managing the information stored in them. Sometimes referred to as database management systems (DBMS), database software tools are primarily used for storing, modifying, extracting, and searching for information within a database.

Widespread prevalent database tools:

- **Database Workbench:** It has different database systems and also includes cross database tools.
- **Oracle:** Oracle Autonomous Database is the world's first fully automated cloud database platform powered by machine learning.
- **MySQL:** MySQL Cluster enables users to meet the database challenges of next generation web, cloud, and communications services.

- **MS Access:** Microsoft Access is a database management system (DBMS) from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software-development tools.

Database tool used in our project: MS Access.

PROJECT MANAGEMENT TOOLS:

Project management software has been implemented as a program that runs on the desktop of each user. Project management tools that are implemented as desktop software are typically single-user applications used by the project manager or another subject matter expert, such as a scheduler or risk manager.

Widespread prevalent project management tools:

- **Teamwork:** For teams of all sizes that need more robust levels of security.
- **LiquidPlanner:** LiquidPlanner is a platform-independent, online project management system which features ranged estimates
- **MS project** Microsoft Project is standard tool for maintaining the project plan.

Project Management tool used in our project: MS Project.

DOCUMENTATION TOOLS:

A documentation generator is a programming tool that generates software documentation intended for programmers (API documentation) or end users (End-user Guide), or both, from a set of specially commented source code files, and in some cases, binary files.

Widespread prevalent documentation tools:

- **GitHub:** If you're using GitHub to manage version control for your software, you have, at the bare minimum, a README.MD file in the repository. To use GitHub for documenting your software, like millions of others have done in the past, just fill that README in with markdown.
- **Dropbox paper:** It's a workspace that brings creation and coordination together in one place. Write and edit, brainstorm, review designs, manage tasks, or run meetings.
- **Google docs:** Google Docs is a free Web-based application in which documents and spreadsheets can be created, edited and stored online. Files can be accessed from any computer with an Internet connection and a full-featured Web browser.

Documentation tool used in our project: GitHub.

SEQUENCE DIAGRAM:

