

Application Software

Application software (or app) is a computer program designed to carry out a specific task other than one relating to the operation of the computer itself, typically to be used by end-users.” This specific task can be in line with the user requirements.

Also the *application software* can be defined as a software that employs the capabilities of a computer to accomplish a dedicated task.

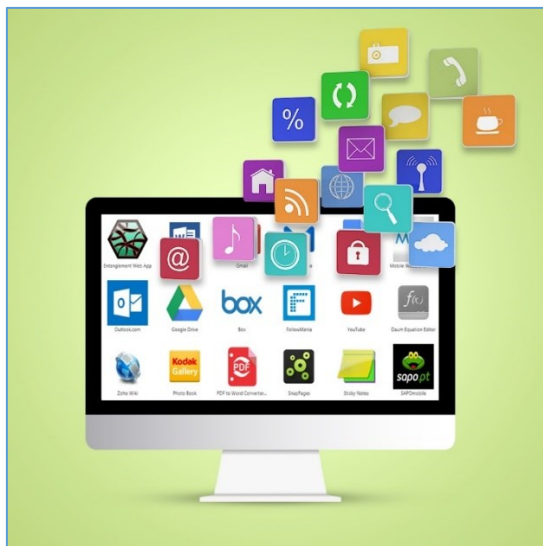
The user will be interacting directly with a piece of software in the case of application software. IT helps them to be more productive and assists them in fulfilling specific personal or business tasks.

Examples of application software are Microsoft Word, spreadsheets, VLC media player, Firefox or Google Chrome, accounting applications, photo editor, mobile apps such as video games, Whatsapp, etc.

It also includes software that is internally/externally developed to fulfill the unique needs of an organization and it will always be based on an operating system.

Application software list as an index of *commonly used types of application software*.

1. Word processing software
2. Presentation software
3. Spreadsheet software
4. Database software
5. Multimedia software
6. Web browsers
7. Educational software
8. Simulation software



1. Word Processing Software

Word processing application software helps users to input, edit, format, and output text content. This type of software program processes words with pages and paragraphs and formats and enhances the text. It also enriches the ‘wording’ experience by helping users with easy access to thesaurus, synonyms, and antonyms.

It helps in embellishing letters with art features such as font styles, colors, and styles. Leading examples of application software belonging to the word processing category are: *Google Docs*, *Microsoft Word Docs*, *Open Office Writer*, *Word Perfect*, *WordPad*, *Notepad*, *AppleWorks*, etc.

2. Presentation Software

Presentation software is a very commonly used type of application software both for personal and business purposes. These programs are specifically designed to help users to present information, thoughts, and ideas with ease and clarity through engaging visual modes such as text, pictures, sound, and video.

The three key elements of presentation software are:

- Text editor to enter and stylize texts
- Enabler to insert graphics, text, video, and multimedia files
- Slideshow facility to display the content

Microsoft's PowerPoint is the chief example of application software in the presentation software category. It helps you exhibit information in the form of slides. You can insert text, images, graphs, and videos to make these slides attractive and engrossing. *Google Slides* and *Apple's Keynote* are other capable alternatives.

3. Spreadsheet Software

Spreadsheet application software helps in organizing, storing, and analyzing data in columns and rows to facilitate calculations effortlessly and efficiently.

These rows and columns can be operated through formulas to execute crucial mathematical functions. This is a digital simulation of traditional physical (paper) worksheets. Examples of application software in the Spreadsheet category are *Microsoft Excel*, *Google Sheets*, and *Apple Numbers*.

4. Database Software

Database application software, also known as a DBMS (Database Management System), is a collection of data associated with any application.

This helps in organizing data by creating and managing a database by storing, modifying, extracting, and searching for information within a database.

When we run an application, it accesses the data from the database and stores it after modifications. Examples of database application software are *MS Access*, *Oracle*, *MySQL*, *Microsoft SQL Server*, *PostgreSQL*, *MongoDB*, *IBM Db2*, etc.

5. Multimedia Software

Multimedia application software helps users to create, edit, or record images, audio, and video files. This type of application software is a dominant player in the entertainment, media, and telecommunication industry.

They are designed to enhance the visual and auditory features of the already present material. They combine together text, audio, still images, animation, video, and interactivity to communicate and engage better. *VLC media player* and *Windows Media Player* are a few examples.

6. Web Browsers

Web browsers or simply browsers are application software used to access and view websites through accessing the internet/ the World Wide Web.

It retrieves the necessary content from a web server and then shows the page on the user's device upon user requests. The most popular web browsers are *Google Chrome*, *Internet Explorer (now Microsoft Edge)*, *Firefox*, *Safari*, etc.

7. Educational Software

Education software or learning management educational software are a type of application software that is made for educational purposes.

They are designed to assist in the teaching and learning process of new content, concepts, and processes. They are of great help to administrators and educators to create content, share lessons, manage classrooms, and manage the institution and student-related data.

This e-learning software offers more personalized and collaborating educational involvements for students and tutors alike. High interactivity level is maintained through the use of multimedia content, such as graphics, pictures, and sound. *Google Classroom*, *Litmos*, *Talent LMS*, *ProProfs*, etc. are some examples.

8. Simulation Software

Simulation application software is developed by modeling a real phenomenon with a set of mathematical prescriptions. Simulation software is designed as an animated model that replicates the operation of an existing/proposed system.

They are helpful in military engineering, gaming, industries such as power plants, space shuttle navigation, etc. where improper operation can lead to catastrophic outcomes. This application software helps in observing and analyzing an operation through simulation without actually doing it.

How to choose the right Application Software

Choosing the ***right application software*** should involve wise brainstorming and critical thinking. Before investing in a software solution, you need to ensure that it will align with your operation, streamline your process, and eliminate risk. You need to confirm and prioritize your needs, review your existing process, and set a budget. Have clarity on what you are looking for and the functions you are intending to achieve with the new application software.

Define your expectations based on the pros and cons of your existing software. Proceed to make a list of requirements for the new software. Categorize these features based on priority.

System and software development

Systems development is the process of defining, designing, testing and implementing a new software application or program. It can include the internal development of customized systems, the creation of database systems or the acquisition of third party developed software. Also software development refers to a set of computer science activities dedicated to the process of creating, designing, deploying and supporting software.

Software itself is the set of instructions or programs that tell a computer what to do. It is independent of hardware and makes computers programmable. There are three basic types:

System software: to provide core functions such as operating systems, disk management, utilities, hardware management and other operational necessities.

Programming software: to give programmers tools such as text editors, compilers, linkers, debuggers and other tools to create code.

Application software (applications or apps): to help users perform tasks. Office productivity suites, data management software, media players and security programs are examples. Applications also refers to web and mobile applications like those used to shop on Amazon.com, socialize with Facebook or post pictures to Instagram.

A possible fourth type is embedded software. Embedded systems software is used to control machines and devices not typically considered computers-telecommunications networks, cars, industrial robots and more. These devices, and their software, can be connected as part of the Internet of Things (IoT).

Software development is primarily conducted by programmers, software engineers and software developers. These roles interact and overlap, and the dynamics between them vary greatly across development departments and communities.

Programmers, or coders, write source code to program computers for specific tasks like merging databases, processing online orders, routing communications, conducting searches or displaying text and graphics. Programmers typically interpret instructions from software developers and engineers and use programming languages like C++ or Java to carry them out.

Software engineers apply engineering principles to build software and systems to solve problems. They use modeling language and other tools to devise solutions that can often be applied to problems in a general way, as opposed to merely solving for a specific instance or client. Software engineering solutions adhere to the scientific method and must work in the real world, as with bridges or elevators. Their responsibility has grown as products have become increasingly more intelligent with the addition of microprocessors, sensors and software. Not only are more products relying on software for market differentiation, but their software development must be coordinated with the product's mechanical and electrical development work.

Software developers have a less formal role than engineers and can be closely involved with specific project areas-including writing code. At the same time, they drive the overall software development lifecycle-including working across functional teams to transform requirements into features, managing development teams and processes, and conducting software testing and maintenance.