Software Development

Application Software

**Word Processors:** I have one word processors available to me. Given I have a windows device, I have Microsoft Word.

**Spreadsheets:** I have one spreadsheet available to me: Microsoft Excel.

**Presentations:**  Again, I am open to one presentation software, Microsoft powerpoint.

**Databases:** The database software I have is Microsoft Access

**Graphics:**  In my computer I have access to photoshop, 3D viewer (native to windows), Paint 3D and the built in windows photo editor.

**Games:** I don't play many games so many of them available via the internet. I do although have steam which runs a variety of games.

**Communications:** The only communications software I am aware I have is MS NetMeeting.

**Browsers:** I have many browsers, the one I use most frequently is Google Chrome. I also have Mozilla FireFox which I use from time to time. Internet Explorer is also on my computer but I rarely use it.

Different Stages of the Software Development Life Cycle

The six stages of the software development life cycle are: planning, analysis, design, development and Implementation, testing and maintenance.

Planning is the first and arguably the most important step of software development. Flawless planning makes the succeeding steps exponentially easier. It is pretty self explanatory, make a good plan before creating any program.

Analysis is the second step and it basically implies to analyze the software at every stage and taking notes to ease the coding process.

The third step, design, is building the actual structure of the project. This will help to remove any possible flaws. By creating a standard for their code, a coder can continue their project with confidence.

The fourth step, development and implementation is where the actual development of the software begins. Implementation is where the program is tested throughout development to see if it working properly.

Testing is the process where you test the program. This will help to debug anything that may occur in your software. Any errors will surface now and you can fix them.

Maintenance is the process of maintaining the software so that it does not go obsolete. Upgrading the program from time to time.

Difference Between Source Code and Machine Code

Source code is the code a human writes into a compiler that is usable and readable by other humans. It is essentially any code you write to create programs, and can be compiled and interpreted by humans.. Machine code is the low level binary data that a computer processor can read. Machine code can be directly executed by the computer. That is the difference between source code and machine code.

Difference Between an Interpreter and Compiler

An interpreter translates a program only one statement at a time. It takes a comparably short time to analyze all the users source code but it has a longer overall execution time. Interpreters are relatively memory efficient since ni object code is generated. It will only stop the program when the first error is met. This way the programmer knows exactly where the problem is so debugging is easy.

A compiler scans the entire program at once and translates it all into machine code. It takes longer to analyze all the data but the overall execution is faster. Unlike interpreters, compilers generate intermediate object code which intern requires more memory. It scans the whole program and then generates the error message without pinpointing the exact problem. Making the debugging much harder.

Advantages and Disadvantages Related to Using an Interpreted Programming Language Over a Compiled Language

Advantages of using an interpreted programming language over a compiled one may be that it takes less time to analyze the code. Interpreters are more memory efficient as they don't create any intermediate object code. Debugging is also a lot easier when using an interpreted programming language. Disadvantages may be that the overall execution time is slower. And more extra work is required.

Ordering a Hamburger



Pseudo Code

Asks user for toppings and notes the information

Chef makes the order

Cashier ask if user is paying with cash

If so user pays with cash and takes order

If not user pays with card of choice and takes order