

Writing a Preliminary Proposal for a Computer Programming Project

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Choosing a Topic

Don't be concerned about correctness; just write down what is in your head instantly. Let your mind run freely without restriction. Keep on writing and generating any words until you are mentally tired. The following guidelines may help you to think of topics. What can a C++ program do to improve my life or enhance my efficiency?

Example #1: How can it help me manage my personal life? Design a computer based calendar system that would remind you of all your important dates.

Example #2: How can it help me manage my bills so that I will not be penalized for late payments? Design a bill/payment recording system to monitor all your bills.

Example #3: How can it help me maintain my automobile? Design a C++ program to log the maintenance schedule and update condition for your car(s).

- Layout the picture of what you expect this program to accomplish

For example #1, you may want to see your calendar pop up on the screen as soon as you turn on your computer to remind you what you need to do today or tomorrow. If anything important comes up, then you should be notified by a long beep or even a human voice to say it out loud.

- Estimate the feasibility to render this project

Can it be done in the given length of time? What kind of tools or knowledge do I need to implement this project? What are the obstacles that I have to face or overcome?

- Limit the scope of the project

The scope of the project can be adjusted according to your own resources and time. Try to predict what can be done within what time.

- Layout the procedure to implement the task

Write a flowchart or a pseudo-code diagram to streamline the process in a logical order. Remember this can be changed along the way, so be flexible in structure.

- Finally, try to write an actual C++ code according to your flowchart or pseudo-code plan

Start with a small segment. Learn from a mouse, which eats its cheese bit by bit. Do not be over aggressive and try to swallow the whole cheese at once. Haste makes waste and frustration. Try to develop a good habit of modular programming. Both programming and writing a thesis are the same process of training in organizing your thoughts. This not only develops the left hemisphere of your brain for logic capability, but also stretches the "muscle" on the right hemisphere of your brain for organizing and orchestrating ability.