

Guidelines for a Computer Project in Several Stages

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1. Purpose and guidelines for this project

- In your proposal, explain what this program is going to do.
- Make sure the scope of this project is within your capability.
- Don't try to build a rocket by a C++ program. However, a rocket simulation game is a good possible choice.

2. Features or special functions

- In this program, explain what kind of functions the program can perform; i.e., if it is an accounting program, you might say that this program can calculate the IRS income tax based on number of exemptions, marital status, pre-tax gross pay, and dependents, etc..
- Try to think in terms of users. How would individuals use your program? What kind of functions on the screen can you provide them? Is this program really easy to use? Think about what is called "user friendly."
- Include as much detail as possible.

3. Planning

- Collect all the information you need from the library, Internet, or additional sources.
- Budget your time and set the target due date.
- Don't wait until the last minute to start doing it. You **only have about a month!**

4. Implementation

- Up to this point, you can try to put together all the materials you have in hand and proceed to construct a flow of information processing.
- First, write a flowchart or pseudo-code diagram as a blueprint to set the work procedure.
- Summarize all the possible output you want to present on the screen or monitor for user to interface with.
- Check the logical flow and see if it is smooth or awkward.
- Process the actual coding with C++ IDE environment.
- Use as many comments as possible to enhance readability of your program. It is helpful in future debugging.

5. Testing & Debugging

- 1 Act as a very critical user who will pick up on any error when you test-run your program.
2. Use simulated data to test your program if applicable.

6. Packaging and roll-out

- After a thorough error-free trial-run, make an executable file for your project program. The .exe program is your final product to be ready to use in any platform.
- Try to run this .exe file on any computer without Visual Studio/C++ IDE installed. If it runs ok, then your project is successful and ready to be distributed.

7. Documentation—Final Report

Write a report on all the procedures using the following format:

- A. Purpose
- B. Functions
- C. Planning
- D. Implementation—including flowchart
- E. Testing procedure and the Results of testing

This must be typed and a printed copy will be submitted before or during the final week.