How to get a good mark for your final report

Who is your audience?

This is an artificial situation

Supposed audience:
• a fellow CS4 student (doing the same options)
• better to assume a good student

Actual audience:
• a member of staff who may not know too much about your topic, but may be quite expert
• you are also writing for your tutor
• in case of doubt, another person who does not know what you have done may be involved

The report is vital …
… but you cannot assume that the reader knows much.

You need to demonstrate
• what you know
• what you have learnt
• what you have discovered
• what you have done.

YOU DON’T GET MARKS FOR WHAT YOU ASSUME.

So you have to explain to the reader the technologies and practices you are using. You also have to explain the program you have written.
How to describe your research

Don't tell us what you did -- tell us what you found out. Here is a sample piece of student writing:

"In the initial stages of my assessment, before I could start work on the implementation of my system, I had to do a lot of groundwork. This was because I did not feel that I had a very strong understanding of TCP/IP from my CS2 courses and this would be an important part of my project work. My first task was to do extensive reading in these areas, therefore knowledge had to be acquired through research in the LRC. The two books that I looked at were "Computer Networks: a systems approach" by Larry Peterson and Bruce Davie and "Internetworking with TCP/IP" by Douglas E. Comer. Both of these books covered computer networking in great depth, but the book by Comer emphasised more on TCP/IP. In fact this book is in three volumes. I found one chapter on socket programming in volume 1."

What can we learn from this?

Alternatively, the student could have written:

"The client and server will communicate using TCP, so will need to use socket system calls (Comer, chapter 20)."

Both of the books the student read should be in the bibliography, even though (s)he only explicitly refers to one of them.

The first (long) example really says very little. If you adopt this style, you are more likely to have a report that is too long than one that is too short.

Another example:

"I went to the library and got a book by James." 

WRONG

"I went to the library and found a book that said that there are five normal forms."

SLIGHTLY BETTER

"There are five normal forms (James 99)."

GOOD

What to say about your program

The idea is not to provide program documentation, but to describe the interesting bits.
- program documentation has to describe every module in similar detail … it belongs in an appendix to the report

Say each thing once
- if you solved several similar problems, or used the same technique to solve several different problems, explain one
- put repeated stuff in the appendices
If you have learnt a new language or technology, explain it using examples from your project.

- **INCLUDE** code samples
- All the code you’ve written should be in the appendices
- Do not include material you did not write yourself (if you **need** to do this to aid clarity make sure it’s clear which parts you wrote and which you didn’t)
- In exceptional cases you might include for example a requirements specification or other source document from your ‘customer’
- Any **generated** code should be clearly distinguished from what you developed yourself
- This can require hand mark-up, if you are using some systems (such as Visual C++, some Java IDEs, etc.)
- No wizard-produced code

**When to say “I”**

When it would be clumsy not to do so.

- You should use the first person (“I”, “me”, “my”, and so on) when referring to your ideas and opinions, things that you have done, and things that you have produced.
- When referring to the work, ideas and opinions of others you should use the third person (“he”, “she”, “they”, “his”, “her”, “their” and so on).

**Use the active voice rather than the passive voice**

**DON’T** say “the program was designed by me”

**INSTEAD** say “I designed the program” and so on

**Where folk went wrong with the IPR**

All the things mentioned above.

Not doing enough work.

Not providing **evidence** of the work they did

**How to get a good project grade**

Don’t settle for mediocrity, either in the work you are presenting or in the way you present it

- **Completing** a project is not necessarily a great achievement: what is there about the work you have done that is an achievement?

- Too late now to worry whether you have made the best choice of project, or the right decisions along the way, but **not** too late to write a discussion of the decisions you made

- Every project can be extended: say how, and say why it would be interesting to do the additional work
Quantity / Quality of Work

How long does it take to design a database?

- In an exam we might expect students to produce an ERM of perhaps 5 or 6 entities from a case study in under an hour.
- A CS2 student may be expected to do a normalization exercise in under an hour.

But how good a job could they do in that time?

What makes yours impressive? What is it about what you have done for your project that raises it above the level that might be expected for a Level 2 assignment?

We need to know what you have achieved.

The achievement needs to be practical, but must be grounded in your programme of study.

If you have just written about a system you have produced, the comment is likely to be

“Where is the academic content?”

If you have just written about some reading, the comment is likely to be

“Where is the practical work?”
or

“How is this relevant to your project?”

To get a good grade, we would expect to see:

A report that presents
- a substantial volume of design
- a substantial amount of implementation
- a substantial amount of relevant research
- an explanation of why you did the things you did and what you learned by doing them
- a description of the problems you faced and how you solved them
- a reasoned evaluation of the quality of your work

You need to make it clear how your research is related to the practical work you have done, and how the practical work built on the research.

Don’t forget to tell us about the process

You won’t get a good grade if you didn’t do any work, and you won’t get a good grade if you don’t write a good report.

Also, you will find it hard to get a good grade if you haven’t managed the project successfully, and we expect you to tell us about how you went about it

- what approach you took
- what went well
- what problems arose
- how you solved them
- what you learned by doing the project