

**Project Content**

1. Synopsis: A summary of what you are aiming at in your project.
2. Acknowledgements: Here you thank people who have been helping you in your project for: guidance, moral support, financial support, understanding and cooperation  
These people may be: friends, parent, owners of the business, your teacher, lab attendant.  
[Caution: Never thank anyone for writing your program, nor do you acknowledge the contribution of your tuition teacher]
3. **Report's table of contents.**  
[This is very important as it will help you're the teacher marking your project to find the appropriate sections]

**Additional information:**

- Use 12 pts for normal text with 1 ½ line spacing, and fully justified.
- The font should be very formal e.g. Arial, Times New Roman.
- For titles you may use other fonts as long as they are easy to read.
- For titles and subtitles use larger characters e.g. 16 pts for main title and 14 for subtitles
- Remember you need to leave space for the binding, this can be set in the page setting using the "gutter".
- For Binding use very simple spiral binding, hard cover is just a waste of time and money.
- The cover of your project should contain:
  - o Project title
  - o Name of student, Index Number
  - o College/Year
- There is no need for use of colour and picture on the cover, they don't bring marks.

**Chapter 1 :Analysis**

[Give a brief description of the analysis process]

**1.1 Introduction: Describe the background of the business/organisation as follows:**

[N.B. When presenting the sections it should be 1.1 , 1.2 etc.. but the order in which the work should be carried out should be 1.4 should be done before 1.1, 1.2,1.3,1.5..]

1<sup>st</sup> paragraph: History of the organisation, i.e. dates, founder, managers and other people involved. What is the purpose of the organisation, describe briefly what it does. You can provide a site plan and photo of the building where the organisation is found.

2<sup>nd</sup> paragraph: Describe briefly the state of the organisation presently, i.e. volume of work, data and complexity of work.[E.g. number of customers, amount of product, frequently of work., you can provide photos as supports]

3<sup>rd</sup> paragraph: Describe how the business may change in the future.

*[The above section serves to describe the system and its complexity to the examiner, the facts and figures provided will help you justify the need for computers]*

**1.2 Description of the problem:**

- Give the broad problem at hand, which is how the actual system is not able to perform its function properly.
- Specific problems: Describe specific task and related problem e.g. paperwork during recording, producing of reports for management.

**1.3 Aim & Objectives of the project:**

- General business objectives: e.g. reduce cost
- Computer-related objectives: e.g. need to sort data etc.

**1.4 Description of existing solution (existing system), describe how in the actual system the **key functions** are carried out.**

[You can include your transcript of interview here and DFD]

- Describe the data required by the system and the form it takes.
- Describe the data collection methods
- Describe data processing
- Describe the output produced, and the form it takes

[Here, you will include photocopy or scanned pictures of document collected during fact finding]

e.g. of key functions in a library system:

- registration of new members
- recording issues of books
- recording return of books
- processing fines etc..

While describing the key functions of the system, the data required, data collection methods, processing etc. will crop up by the themselves.

**1.5 Evaluation of existing solution**

- List the advantages of the current system.
- List the disadvantages of the current system.
- Suggested improvement of the actual system without much effort.

**1.6 Description of other possible solutions.**

- Describe the 1 possible solution. E.g. employing additional staff, and describe how the system will work under this particular solution.
- Describe the final proposed solution. Normally this should be the computerized solution, describe how it will work, i.e. Hardware, software and changes needed to implement it.

## 1.7 Evaluation of the other possible solution

- Evaluate the advantages and disadvantages of the alternative solutions.
- Evaluate the advantages and disadvantages of the final proposed solution.
- Describe the scope and limitations of the proposed solution, i.e. what the new system will be able to do and what it cannot do.

## ASSESSMENT CRITERIA FOR COURSEWORK [From your syllabus]

ANALYSIS	1 mark	2 marks	3 marks
1. Description of the problem	Brief description of the background to the business or organisation.	<u>Description of the background to the business or organisation, together with the nature of the problem to be solved.</u>	
2. Objectives ( <b>must be stated in relation to the proposed solution</b> )	Objectives listed in general business terms, e.g. to make a process faster, to save time or resources.	Objectives listed in computer-related terms, e.g. create a database, sort, search a database, edit a record etc.	Objectives listed in <u>both general business terms and computer-related terms</u>
3. Description of existing solution	Incomplete description of the current solution	A <u>full description of the current solution, including data input requirements</u> (data capture methods and data dictionary, if applicable) and specifications, the <u>data processing and output requirements</u> and specifications.	
4. Evaluation of existing solution	Incomplete evaluation	Complete evaluation highlighting <u>advantages, disadvantages and suggested improvements.</u>	
5. Description of other possible solutions, (Including the proposed solution)	Description of one other possible solution, i.e. the proposed solution	Description of at <u>least two other possible solutions, including the proposed new solution.</u>	
6. Evaluation of other possible solutions	Evaluation of the advantages and disadvantages of the alternative solutions.	Evaluation of the <u>advantages and disadvantages of the alternative solutions.</u> The <u>choice of proposed solution should be justified.</u>	

**Chapter 2 :Design**

[Give a brief description of the design process]

## 2.1 Plan

- Explain how you would proceed to solve the problem, that you intend to break the problem using top down design
- Show how they are related to the objectives listed in the analysis stage.
- Explain that you carry out the output, input, file and program design
- Give a Gantt chart showing how you would carry the project over a given period of time.

## 2.2 Description of the method of solution

## 2.21 Output design

- List of output screen
- brief description of each screen and its content
- list of paper based output/reports/hard copy
- brief description of each report and its purpose & content

## 2.22 Input design

- list of data collection form (if any) and description
- list of input screen
- Brief description of each screen and its content

## 2.23 File design

- List of master files & transaction file
- File structure for each file: i.e field name, type, length, decimal
- Followed by description of fields and formats e.g. A999

## 2.24 Program design

- Program chart (top down chart)
- List of program files
- Program specification for each program i.e. purpose of each program, inputs, outputs and files used.
- Algorithm in either flowchart or pseudo-code

## 2.3 Hardware requirements

- Describe the different hardware required to implement your solution.
- Justify the use of each piece of hardware.

## 2.4 Software requirements

- Describe the software that would be required to implement the system.
- Give reasons why you are using this particular software.
- Give the advantages of the software.

DESIGN	1 mark	2 marks	3 marks	4 marks
7. Plan	Incomplete or unclear plan	Detailed plan, including time schedule.	Detailed plan, time schedule clearly linked to the objectives in section 2.	
8. Description of the method of solution. This could be in the form of top-down design, structure diagrams, flowcharts or pseudo-code.	Unclear or confused method of solution	Clear method of solution but some aspects of the method of solution are missing.	Clear and detailed description of the method of solution, including database tables, any relationships.	
9. Hardware	An incomplete list of hardware.	A complete list of hardware.	A detailed specification.	A detailed specification together with at least two reasons why such hardware is needed in the context of the proposed solution.
10. Software	List of software used.	Description of the software used.	Justification as to why this software is being used or written.	

### Chapter 3 : Development & Implementation

[Give a brief description of the implementation process]

3.1 Explain the commands you have used while developing the software.

3.2 Provide the program listings together with annotation explaining what the different section of the program does.

3.3 Provide a summary showing how the different objectives have been met.

3.4 Testing

3.41 Test strategy: Explain how you would proceed to test the modules, to show that work together.

3.42 Test plan: Provide a clear test plan with different tests to cater for normal, abnormal and extreme cases.

3.44 Sample data

3.44 Test result

- Provide screen shots showing the software is actually responding to the different possibilities
- Provide copies of reports produce by your software.

IMPLEMENTATION		1 mark	2 marks
11. Method of solution related to the problem by suitable means, including the use of annotated listings or pseudo-code.		Method of solution described in generic terms.	Method of solution described in specific details relevant to the problem.
12. Accurate method of solution		Partly successful, some objectives achieved as listed previously.	Completely successful, all objectives achieved as listed previously.

  

TESTING	1 mark	2 marks	3 marks	4 marks
13. Test strategy	Incomplete test strategy, which should include the data to be tested together with the expected results.	Complete test strategy, which should include the data to be tested together with the expected results.	Complete test strategy, which should include the data to be tested together with the expected results and linked to the objectives in section 2.	
14. Test results (Normal, extreme and abnormal data)	One type of data tested.	Two types of data tested.	All three types of data tested.	All three types of data tested and linked to the objectives in section 2.

### Chapter 4 : Technical Documentation

4.1 Overall system overview

- Include a dataflow diagram
- Give a top-down chart to present the menu system

4.2 Hardware and Software Requirement

- Give a summary of the hardware required by the system
- Give a summary of the software required by the system

4.3 File structures

- Provide a relationship diagram to show how the different files are linked together, specifying the key and foreign fields.
- Provide the structure of each file, with field names, types, length

4.4 Algorithm/Pseudocode/flowcharts

- Provide the algorithm for each module

4.5 Screen shots

- Provide a list of input screen design shot
- Provide a list of output screen design shot
- Provide a list of reports design shot

### Chapter 5: User Documentation

5.1 Starting the software

- Describe how the user can start the software

## 5.2 The menu system

- Describe the menu system, provide a diagram to give the user an overview of the menu system.
- Briefly describe the submenus

## 5.3 Using the software

- Describe how you would use the different options provided
- Explain major messages (errors), explaining what is valid or not

## 5.4 Closing the software

- Explain the user can leave the software

## 5.5 Troubleshooting

- Give a list of error messages produce by your software and explain their significance in simple terms.
- Explain how the user can deal with problems arising from your software, i.e why the user is unable to do a particular operation
- Explain how the user can deal system errors, i.e printer

DOCUMENTATION	1 mark	2 marks	3 marks
15. Technical documentation	Inadequate documentation	Satisfactory documentation which would enable maintenance or modification of the system.	
16. User documentation	Inadequate or unclear details	Clear details but incomplete	Clear and complete user guide.

**Chapter 6 : System Evaluation and Development**

## 6.1 The good and bad points of the final implemented solution

## 6.2 Successful objectives

- Show how each objectives that you have set in the section 1.3 has been met.
- Clearly indicate which module is meeting which objective.

## 6.3 Objectives not completed

- Explain which part of the project has not been completed and why
- Briefly show how it can carried out

## 6.4 Future development and improvements

- Describe part of the project which you feel that can be improved and how.
- Describe possible development that you initially did not thought of and how they can be implemented.

SYSTEM EVALUATION & DEVELOPMENT	1 mark	2 marks	3 marks
17. Evaluation	Inaccurate or trivial evaluation.	Reasonable evaluation.	Reasonable evaluation linked to the objectives in section 2.
18. Developments (The Candidate does not necessarily have to be capable of carrying out these suggestions).	Some improvements suggested.	Realistic and meaningful suggestions for development.	

TECHNICAL SKILL	1 mark	2 marks	3 marks
19. Technical skill	Basic use of the software.	Competent average skill.	High level of skill in using the software.