4.14.5.1 Analysis Students are expected to:

• produce a clear statement that describes the problem area and specific problem that is being solved/investigated

• outline how they researched the problem

• state for whom the problem is being solved/investigated

• provide background in sufficient detail for a third party to understand the problem being solved/investigated

• produce a numbered list of measurable, "appropriate" specific objectives, covering all required functionality of the solution or areas of investigation (Appropriate means that the specific objectives are single purpose and at a level of detail that is without ambiguity.)

• report any modelling of the problem that will inform the Design stage, for example a graph/ network model of Facebook connections or an E-R model.

A fully scoped analysis is one that has:

• researched the problem thoroughly

• has clearly defined the problem being solved/investigated

• omitted nothing that is relevant to subsequent stages AQA AS and A-level Computer Science.

• statements of objectives which clearly and unambiguously identify the scope of the project

• modelled the problem for the Design stage where this is possible and necessary.

*Design to do list*

Students are expected to articulate their design in a manner appropriate to the task and with sufficient clarity for a third party to understand how the key aspects of the solution/investigation are structured and on what the design will rely..

Process/Input/Output/Tables

Add new customer

|  |  |  |
| --- | --- | --- |
| Input | Process | Output |
| Present for all students attending (/)  Unaoutorised students O  Late student L | Find the register system. Select this class. Mark students | Register marks saved in database and a report of missing students is sent to the managers |
| Add a new student Forname, surname ID | Check if all characters are letters (RE) check to see if its more than 15 characters | New student added to the register |

* Data Dictionary - A Data Dictionary provides information about each attribute
* Record Structure
* ERD
* Algorithm Design
* SQL Design
* UML Diagrams
* Class
* Composition/Aggregation Diagram
* Modular Structure
* HCI - Wireframe designs
* Any other data modelling that you wish - the above are just ideas