Analysis

Analysis Overview

During the Analysis phase of Software Design and Development we need to consider two areas:

- the purpose of the software
- the functional requirements of the software

Program Purpose

The purpose of a piece of software is often expressed as a description of what the software will be used for, which can be used to help create functional requirements.

Functional Requirements

Functional requirements are defined in terms of inputs, process and outputs:

- What information will be input?
- What process should be applied to these variables? (often a calculation, decision, or use of a pre-defined functions)
- What information will be displayed to the user?

Analysis Example

Program Purpose

A class of 20 pupils is raising money for charity. For each pupil, the program will ask how much money they raised, validate that it is a value larger than 0, and then add the amount to the total. When there are no pupils left, the program should decide if the class has won a prize by raising more than £150, displaying a congratulations message if they have. The program will then display the total amount raised.

Analysis Example

Functional Requirements

Inputs	Processes	Outputs
Amount raised by pupil	Validate amounts raised	Congratulations message
	Calculate total	Total
	Decide if class have won a prize	