Modular Design

As problems solved by computer programs have bigger and more complex, it is harder for one person to devise and implement a solution on their own.

Modular, top-down design is when the task that the program needs to perform is split into smaller subtasks.

Eventually each task becomes so small it can be easily programed, this is called stepwise refinement. The program for each subtask can then be implemented independently as a separatae module, which will later be put together, to create the solution for the main program.

The different parts of a program can be shown in a structure diagram , it would show all the separate modules the program will be split into.

The program will be easy to write and test, because each module is small and can be written and tested independantley.

The design will clearly show how the different parts of the program relate to each other, this will reduce errors.

Advantages to using a top-down, modular design

It can be easy for a team of programers each working on a seperate module, to develop the program.

Modules writen separatley to perform a small and spesific task can be reused in other parts of the program.