INTRODUCTION TO ANALYSIS AND DESIGN

Analysis emphasizes an investigation of the problem and requirements, rather than a solution. This is an exciting and often challenging task, and focuses on describing what the problem is, rather than on how it will be solved.

In many cases, analysts build models of the existing system to help software engineers understand how the customers requesting the software are currently dealing with the problem the software should solve.

The result of the analysis is a system specification, a detailed, logical description of either the existing system, or of the new system.

The software / system designer uses the system's specification as a starting point to determine how the system should achieve its requirements. Once a particular solution has been adopted, the specification is expanded and modified to clarify what must still be defined in order to be able to achieve the requirements.

The product of this activity is a complete, detailed software design.

The relation between analysis and design

Analysis and design are related activities. As such they may be thought of as two parts of the single process of converting requirements into a clear, complete and coherent software system. Thus, many of the special techniques (and computer-based tools) used during analysis carry through into design. It is for this reason that the two activities are studied together.