

Design consists of defining a system in sufficient detail to permit programming or other implementation. The product of a design is a *design document*. You are to use the format shown below for your design document.

1. Introduction/Overview
2. System Design (also called architectural design) - overall design of software as discussed in class
3. Decomposition - link between system design and detailed design.
4. Detailed Design (also called component-level or program design) - detailed description of each program module or class/object. For each module, you should specify the software interface and other characteristics such as:
 - module name
 - interface (e.g. hyperlinks, calling convention, input arguments, output arguments)
 - operation and/or logic performed (action, processing specification)
 - side effects
 - and so on.
5. Data Design – description of major data structures used by software
6. User Interface Design – description of the user interface to the software
(Note: user can be another software)
7. Other sections will depend on the type of design. Some possibilities are :
 - database schema
 - various UML diagrams
 - class definitions
 - data flow diagrams
 - flowcharts
 - ER diagrams
 - preliminary testing considerations
 - and so on
8. Appendices, References, Index, Glossary, and so on