

SE 2A04 Fall 1999

Software File Structure

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General Recommendations

- Express the structure of the software's design in the software's file structure
- Put files that work together in the same directory
- Use version control software to control and track modifications to files

Kinds of Files

- A software system will often contain various kinds of files for holding:
 - Source code
 - Object code
 - Scripts
 - Binary executables
 - Data
 - Documentation
- Use file name suffixes to distinguish between different kinds of files

Modules

- Put all the files associated with a module in the same directory
- The directory of a module should contain:
 - A **readme** file describing the module and its use
 - A **status** file listing what is finished and what needs to be done
 - An **install** file that will install the module
 - A **make** file to automatically update module files
 - A **maintenance** file explaining how to maintain the module files

Interfaces

- Put the interface and the implementation of a module in separate files
 - Enables an implementation to be easily replaced
 - Other modules only need access to the interface file
 - In C, the interface can be put in a header file while implementation is put in a source file
- List at the top of each implementation file the interfaces that need to be imported
 - In C, this is done with an `#include` command