CSE 687 - Object Oriented Design

Streams Reference

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Chapter 11 - iostreams

Streams Library Classes

Streams:

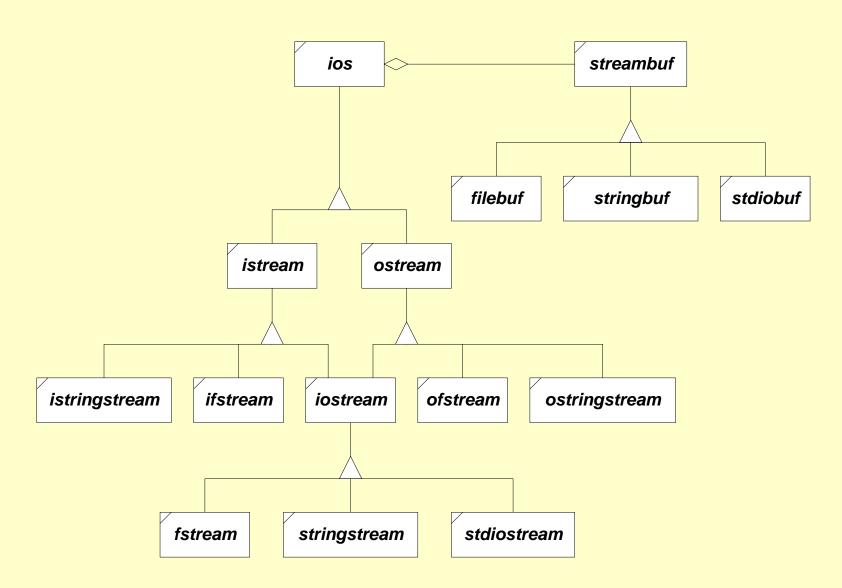
Part of the Standard C++ Library. They are a family of related classes designed to insert and extract data from devices and memory buffers. The most important classes are:

- ios which controls formatting and manages error state for all streams
- streambuf abstracts buffering of data during insertion and extraction from streams
- istream provides the basic client interface for extraction from a stream
- ostream provides the basic client interface for insertion into a stream
- iostream simply merges istream and ostream.
- ifstream derives from istream specialized for input streams that extract from files
- ofstream derives from ostream specialized for output streams that insert to files
- filebuf derives from streambuf specialized for file buffering
- istringstream derives from istream specialized for input streams that extract from buffers in memory
- ostringstream derives from ostream specialized for output streams that insert to buffers in memory
- stringbuf derives from streambuf specialized for in- memory buffers
- stdiobuf provides compatibility with stdio

Global objects:

– cin, cout, cerr, and clog

iostream Hierarchy



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