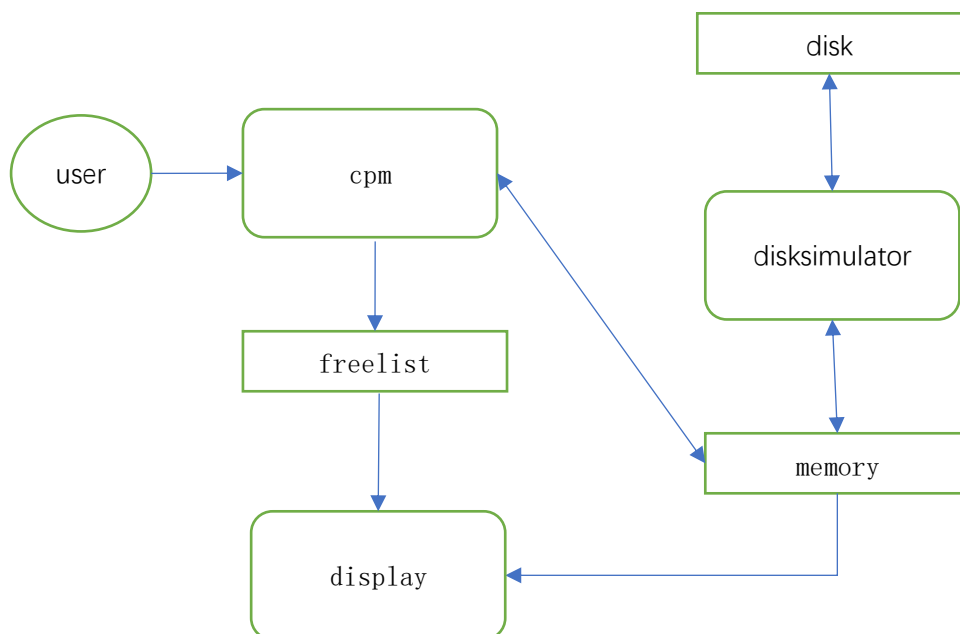# COMP 7500 Project 4 Report   Liangliang Xu

The goal of this project is to design and implement a simple file system, which allows users to list directory entries, rename files, copy files, delete files. Implementation details are included in the source code. This report consists of two parts: design document and lesson learned.

1. Design document

Since function details are already given in the source code, this part will only have data flow diagram.

2. Lesson Learned

During the implementation I encountered a very interesting problem. cpmDir() would sometimes print out unrecognizable stuff, while working perfectly other times. Upon checking, I realized that instead of allocating memory by a pointer, I should use array, especially when knowing the exact size of the memory. It seems that the problem may be caused by the insufficient of the memory allocation.

Another problem is how to parse the input name. I needed to consider different situations in order to stabilize my program, which was a very useful practice because in the real world the input from users can be very different. Every possibility should be considered.