```
#ifndef LIBRARY_MANAGEMENT_SHELF_H
#define LIBRARY_MANAGEMENT_SHELF_H
// Holds the value for the current department.
int department_id = 0;
extern int request;
// Global storage for book names.
char name[];
                                                                                             10
// Removes newline from books to be inserted into
// the Library shelf.
char * removeWhiteSpace(char string[]) {
                                                                                             removeWhiteSpace
   int i;
   for (i = 0; i \le strlen(string); i++) {
       if(string[i] == '\n') {
           string[i] = '\0';
                                                                                             20
   return string;
}
// Defines the structure of the Book on a shelf
// of a precise department.
struct shelf {
   int id;
   int year;
   char title[255];
   //char * author;
                                                                                             30
};
// Defines the structure of a more generic shelf of
// a particular department in the Library.
// => A Department shelf can not hold more than 100 Books.
struct shelves {
   int id;
   struct shelf department[100];
};
                                                                                             40
// Construct three array for Comp. Sci, LIS and Mass Comm.
// Since we are dealing only with 3 departments.
struct shelves library[3];
void insertBook() {
                                                                                             insertBook
   char title[255], *pos;
   int i, bookYear;
   printLines();
   printf("Insert Book into Computer Science Shelf\n");
                                                                                             50
   printLines();
   for(i = 0; i \le 99; i++)  {
       if (!!!library[department_id].department[i].id) {
```

```
printf("Enter the name of the Book: ");
          getchar();
          fgets(name, 255, stdin);
          strcpy(library[department_id].department[i].title, removeWhiteSpace(name));
          printf("The year of Publishing: \n");
          scanf("%d", &bookYear);
                                                                                            60
          library[department_id].department[i].id = i + 1;
          library[department_id].department[i].year = bookYear;
          break;
   printf("Book has been Added with an ID of %d\n", i + 1);
   printLines();
   sleep(3);
   request = 31;
                                                                                            70
}
void removeBook(int id) {
                                                                                             removeBook
   int bookId = id;
   if (library[department_id].department[bookId].id) {
       printLines();
       library[department_id].department[bookId].id = 0;
       printf("Book has been deleted successfully.\n");
       printLines();
       sleep(3);
                                                                                            80
       request = 4;
       return;
   printLines();
   printf("The Book with the ID %d was not found on the Shelf.\n", id);
   printLines();
   sleep(3);
   request = 4;
#endif //LIBRARY_MANAGEMENT_SHELF_H
                                                                                            90
```