

Documentation Standards

All programming projects must be documented. Documentation counts for at most 10% of the programming project grade. At the top of each file, please include a comment block containing the following information. Note, it does not have to look like this "box" style documentation. However, it should be very readable.

1. Your Name
2. Course Name
3. Project Number and Title
4. Due Date
5. Instructor's Name

EXAMPLE:

```
//*****
//
// Ima CPP. Programmer
// Operating Systems
// Programming Project #0: Project Title
// January 1, 1970
// Instructor: Dr. Siming Liu
//
//*****
```

Each procedure or function should have a documentation "header" that includes the following information

1. Function or Procedure Name
2. A Brief Description of the Function or Procedure
3. Value Parameter Data Dictionary
4. Reference Parameter Data Dictionary
5. Local Variable Data Dictionary

EXAMPLE:

```
//*****
//
// Linear Search Function
//
// This function performs a linear search on an list of student
// records. If the search key is found in the list, the return
// value is true and false otherwise.
//
// Return Value
// -----
// bool                                True/False if Key is found
//
// Value Parameters
// -----
// Key            string                The search key
// SList          StudentList          The list of student structures
//
// Reference Parameters
// -----
// location       int                   The location where Key is found
//
//*****
bool linear_search( SList StudentList, string Key, int &location )
```

```
{
// local variables
bool retval;
int ii;

// initialize local variables
retval = false;
ii = 0;

location = -1;

// search for the key in the list
for( ii=0; ((ii<SList.Size()) && (!retval)); ii++ )
    if( SList.Name == Key )
    {
        location = ii;
        retval = true;
    }

// return to calling function
return( retval );
}
```