Program Documentation Requirements Ken Gamradt Electrical Engineering and Computer Science South Dakota State University

Driver/main Files (.cpp)

```
/**********************************
*** NAME
*** CLASS
               : CSc XXX
                                                       ***
*** ASSIGNMENT:
                                                       ***
*** DUE DATE
                                                        ***
*** INSTRUCTOR : GAMRADT
******************************
*** DESCRIPTION: <detailed english description of the current assignment>
*************************
// preprocessor directives
// global declarations and definitions – constants, data types, functions
// main function definition
/***********************************
*** FUNCTION < name of function>
******************************
*** DESCRIPTION: <detailed english description of the function>
                                                       ***
*** INPUT ARGS : < list of all input argument names>
*** OUTPUT ARGS: < list of all output argument names>
                                                       ***
                                                       ***
*** IN/OUT ARGS : st of all input/output argument names>
              : <return type and return value name>
*************************
ReturnType functionName( <argument declarations> )
    // etc...
```

Notes:

- readable, self-describing identifier names are required.
- a separate function description block is required for each function definition other than main.

Header Files (.h)

```
*** NAME
                                                       ***
*** CLASS
               : CSc XXX
*** ASSIGNMENT :
                                                       ***
*** DUE DATE
                                                       ***
*** INSTRUCTOR : GAMRADT
****************************
*** DESCRIPTION: <general english description of the abstract data type>
***
                                                       ***
                <including supporting operations>
************************
#ifndef MYADT H
                                        // myadt.h
#define _MYADT_H
// other preprocessor directives
// exportable declarations and definitions – constants, data types
class MyClass
                                        // exportable
     public:
*** FUNCTION < name of function>
**************************
*** DESCRIPTION: <general english description of the function>
                                                       ***
   INPUT ARGS : < list of all input arguments>
*** OUTPUT ARGS: < list of all output arguments>
                                                       ***
                                                       ***
*** IN/OUT ARGS : < list of all input/output arguments>
*** RETURN
               : <return type and return value>
************************
          ReturnType exportableFunction( <argument declarations> );
     private:
                                        // non-exportable
                                        // No Documentation
         ReturnType nonExportableFunction( <argument declarations> );
         // all other non-exportable members – constants, types, data
};
#endif
```

Note:

• a separate function description block is required for each exportable function declaration.

Implementation Files (.cpp)

```
*** NAME
                                                  ***
*** CLASS
             : CSc XXX
*** ASSIGNMENT :
                                                  ***
*** DUE DATE
                                                  ***
*** INSTRUCTOR : GAMRADT
**************************
*** DESCRIPTION: <detailed english description of the abstract data type>
***
                                                  ***
              <including supporting operations>
*************************
#include "myadt.h"
                                    // matching header file
// other preprocessor directives
*** FUNCTION < name of function>
************************
*** DESCRIPTION: <detailed english description of the function>
                                                  ***
*** INPUT ARGS : < list of all input argument names>
                                                  ***
*** OUTPUT ARGS: < list of all output argument names>
                                                  ***
*** IN/OUT ARGS : < list of all input/output argument names>
                                                  ***
             : <return type and return value name>
*************************
ReturnType MyClass::functionName( <argument declarations> )
    // etc...
}
```

Note:

• a separate function description block is required for each function definition.