June. 4th 2013

1. using namespace std, std相当于一个库，里面存放了许多global class， 这样就不用每次调用函数都写std::cin/cout,  可以直接写cin, cout.
2. \_cdecl: caller clean the stack

\_stdcall: callee clean the stack

1. Include <vector>可以当动态数组使用
2. vector<wchar\_t \*>::iterator这样声明前者是一个迭代器
3. #progma once声明这个文件只能被引用一次， 和include guards效果差不多
4. 如果要对文件修改的时候，先get the latest version, then checkout the document that you need, and then make the modification, and then check in.
5. Ctrl+shift+u: 变成小写字母

Ctrl+shift: 变成大写字母

1. Pointers:
2. \*号用来声明指针以及取“dereferencing”取指针指向地址里所存放的值。
3. &号retrieve the memory address of the variable
4. Int \*ptr;

Int val=1;

Ptr=&val;

Int deref=\*ptr;

1. Int \*nullptr=0也可以写成=null
2. Void \*ptr这样声明成void pointer type
3. Void类型可以hold any pointer type or reference
4. 可以定义的时候直接赋值

Char \*fullname=”fullname”

First.name=fullname

1. Int val=1;

Int \*ptr=0;

//declare a variable ptr2ptr which holds the value-at-address of an \*int type which in holds the value-at-address of an int type

Int \*\*ptr2ptr=0;

1. Enum用来表示一个枚举常量，typedef enum用来表示一个枚举数据类型，里面的类型变量只能在enum类型下定义。
2. Strcmp比较两个string

Wcscmp比较两个wchar\_t

\_mbscmp比较两个unsigned char

When equals 0, means the two string equals.

1. Scope resolution operator

::告诉compiler使用global identifier rather than the local identifier. Identifier可以是变量也可以是函数。

Int amount=123;//global variable

Int main(){

Int amount=456;//local variable

Cout<<::amount<<endl;

Cout<<amount<<endl;

}

1. COM: platform-independent, distributed, object-oriented system for creating binary software components that can interact. It is not an OOL but a standard. COM specifies an object model and programming requirements that enable COM objects to interact with other objects. These objects can be within a single process, in other processes, and can even be on remote computers. They can be written in different languages, and they may be structurally quire dissimilar, which is why COM is referred to as a binary standard; a standard that applies after a program has been translated to binary machine code.  
   The only language requirement for COM is that code is generated in a language that can create structures of pointers and either explicitly or implicitly, call functions through pointers.

A COM object is one in which access to an object’s data is achieved exclusively through one or more sets of related functions.

1. DLL:

-The use of DLL helps promote modularization of code, code reuse, efficient memory usage, and reduced disk space.

-When a program or a DLL uses a DLL function in another DLL, a dependency is created.

More details see separate document.

1. Typedef void\* (\*function)(const char\*)

e.g. typedef void\* (\*CreateInterfaceFunc)(const char\* pszInterfaceName)

it makes CreateInterfaceFunc an alias of the type: pointer to function that takes a const char\* argument and returens void\*

这是dynamically load DLL

Typedef void (\*FunctionFunc)()

Typedef将一个关键字和一种类型联系起来

e.g. typedef int myinteger;

typedef char \*mystring;

typedef void (\*myfunc)();

using like:

myinteger i; ⬄int i;

mystring s;⬄char \*s;

myfunc f;complie equally as void(\*f)();

typedef int (\*t\_somefunc)(int,int);

int square(int u, int v) {

return u\*v;

}

t\_somefunc afunc = &square;

...

int x2 = (\*afunc)(123, 456); // call square() to calculate 123\*456

1. #pragma pack([show]|[push|pop],[identifier],n)

<http://msdn.microsoft.com/en-us/library/2e70t5y1(v=vs.80).aspx>

calling pack with no arguments sets n to its default value.

1. ::可以用来重载class里的构造函数