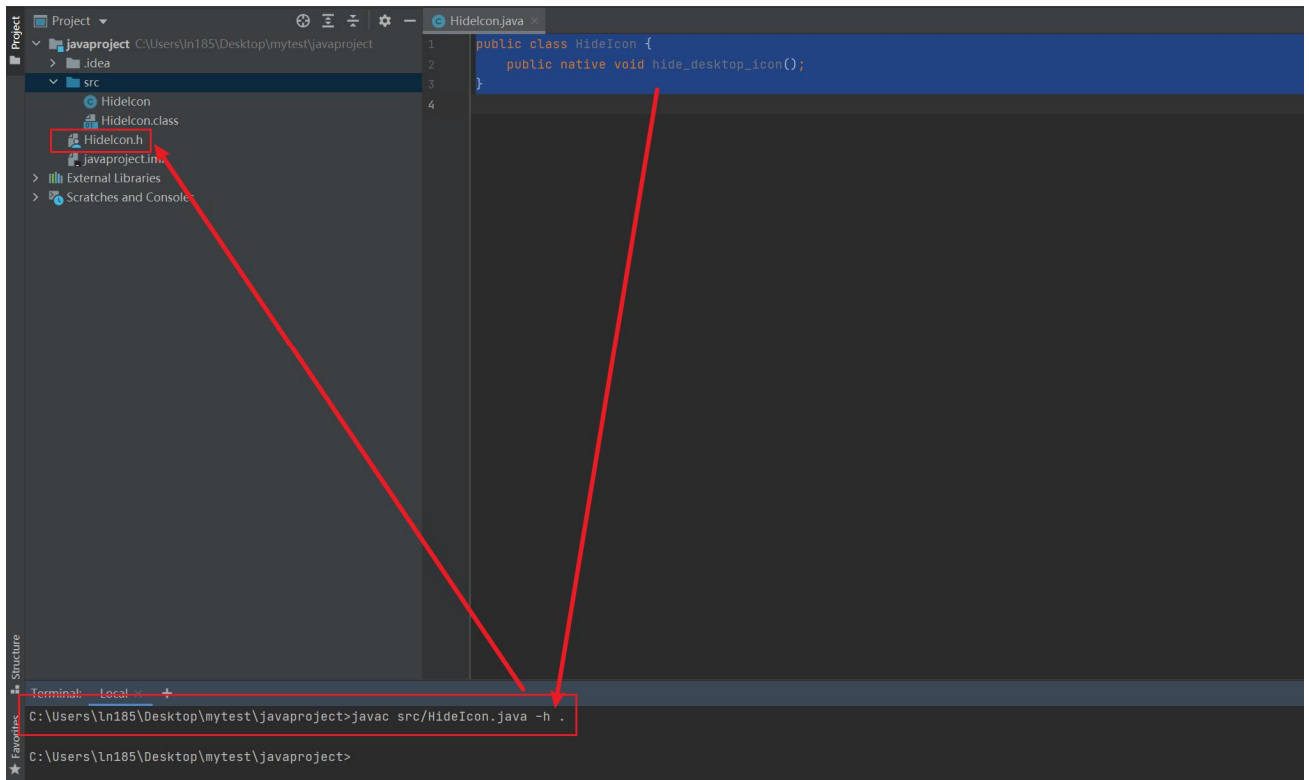


JNI原理及实践

生成头文件

- ```
public class HideIcon {
 public native void hideDesktopIcon();
}
```
- 然后执行 `javac src/HideIcon.java -h .`



## 构建动态链接库DLL

- visual studio-项目-属性-c/c++-常规-附加包含目录添加如下
- `%JAVA_HOME%\include;`  
`%JAVA_HOME%\include\win32;`  
以及Java生成头文件的路径
- ```
#include "pch.h"  
#include <jni.h>  
#include <jni_md.h>  
#include <stdio.h>  
#include <windows.h>  
#include <WinUser.h>  
#include <HideIcon.h>
```

//遍历全部子窗口的子窗口 , Z序遍历

```
HWND findChildWindowHandleByName(HWND parent, int level, TCHAR* winNameBuf)
{
    HWND child = NULL;
    HWND hWnd = NULL;
    TCHAR buf[MAX_PATH];
    DWORD pid = 0, tid = 0;
    do {
        child = FindWindowEx(parent, child, NULL, NULL);
        int ret = GetWindowText(child, buf, MAX_PATH);
        buf[ret] = 0;
        tid = GetWindowThreadProcessId(child, &pid);
        for (int i = 0; i < level; ++i)
            printf("\t");
        printf("%s , pid:%d, tid:%d\n", buf, pid, tid);
        if (memcmp(winNameBuf, buf, sizeof(winNameBuf)) == 0)
        {
            hWnd = child;
            return hWnd;
        }
        if (child)
            hWnd = findChildWindowHandleByName(child, level + 1, winNameBuf);
        if (hWnd != NULL)
        {
            return hWnd;
        }
    } while (child);
    return NULL;
}
```

//遍历全部 explore 下的窗口 , Z序遍历

```
HWND findWindowHandleByName(TCHAR* winNameBuf)
{
    HWND child = NULL;
    HWND hWnd = NULL;
    TCHAR buf[MAX_PATH];
    DWORD pid = 0, tid = 0;

    do {
        //查找 Explore 下的一个窗口,若是能找到则根据 Explore 下的child 继续找
        child = FindWindowEx(NULL, child, NULL, NULL);
        int ret = GetWindowText(child, buf, MAX_PATH);
        buf[ret] = 0;
        tid = GetWindowThreadProcessId(child, &pid);
```

```

printf("%s , pid:%d, tid:%d\n", buf, pid, tid);
if (memcmp(winNameBuf, buf, sizeof(winNameBuf)) == 0)
{
    hWnd = child;
    return hWnd;
}
//遍历子窗口们
if (child)
    hWnd = findChildWindowHandleByName(child, 1, winNameBuf);
if (hWnd != NULL)
{
    return hWnd;
}
} while (child);
return NULL;
}

```

```

JNIEXPORT void JNICALL Java_HideIcon_hideDesktopIcon
(JNIEnv*, jobject) {

    HWND hWnd = NULL;
    HWND hWnd2 = NULL;
    TCHAR desktopNameBuf[] = { L"FolderView" };    // 桌面句柄名

    // 遍历桌面句柄
    hWnd = findWindowHandleByName(desktopNameBuf);
    if (hWnd != NULL)
    {
        // 切换显示与隐藏桌面
        if (IsWindowVisible(hWnd))
        {
            ShowWindow(hWnd, SW_HIDE);
        }
        else
        {
            ShowWindow(hWnd, SW_SHOW);
        }

        // 模拟按键 Win+D
        //Sleep(100);
        //keybd_event(VK_LWIN, 0, 0, 0);
        //keybd_event('D', 0, 0, 0);
        //Sleep(100);
    }
}

```

```
        //keybd_event(VK_LWIN, 0, KEYEVENTF_KEYUP, 0);  
        //keybd_event('D', 0, KEYEVENTF_KEYUP, 0);  
    }  
};
```

执行代码

```
• public static void main(String[] args) {  
    System.load("C:\\Users\\ln185\\Desktop\\mytest\\javaproject\\D111.dll");  
    HideIcon hideIcon = new HideIcon();  
    hideIcon.hideDesktopIcon();  
}
```

#java