

用C写的在桌面上飘雪的特效程序 PDF转换可能丢失图片或格式，建议阅读原文

[https://www.100test.com/kao\\_ti2020/270/2021\\_2022\\_E7\\_94\\_A8C\\_E5\\_86\\_99\\_E7\\_c67\\_270962.htm](https://www.100test.com/kao_ti2020/270/2021_2022_E7_94_A8C_E5_86_99_E7_c67_270962.htm)

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#include windows.h
#include time.h #include stdlib.h #include iostream.h
const int SnowNumber=500. //雪点数量 struct SnowNode {
POINT position. //雪点位置 int iColor. //先前的颜色 int iSpeed. //下落速度 int iMove. //下落距离 int iStick. //粘贴度 }. SnowNode
SnowNodes[SnowNumber]. //雪点数组 int hTimer=0. int
CrWind=0. int CrStep=0. //当前循环步数(用于限速) int
ScreenWidth=0. //屏幕宽度 int ScreenHeight=0. //屏幕高度 void
GetScreenSize(). void CALLBACK TimerProc(HANDLE
hWnd,UINT uMsg,UINT idEvent,DWORD dwTime). void
InitSnowNodes(). void MoveSnowNodes(). int WINAPI
WinMain(HINSTANCE hInstance, HINSTANCE hPrevInstance,
LPSTR lpCmdLine, int nCmdShow ) { MSG msg. //标准windows
消息 LARGE_INTEGER Frequency. //高性能定时器频率
LARGE_INTEGER StartCt,EndCt.//高性能定时器计数 float
Elapsed Time. //时间间隔 srand((unsigned)time(NULL)).
GetScreenSize(). InitSnowNodes().
QueryPerformanceFrequency(&StartCt). //执行运算前计数值
if(PeekMessage(&EndCt).//执行运算后的计数值
Elapsed Time=(EndCt.QuadPart-StartCt.QuadPart)/Frequency.QuadPart.
if((Elapsed Time < 0.0005)) Sleep(2). //简单限速 else
if(Elapsed Time < 0.0010) Sleep(1). else if(Elapsed Time < 0.0015)
Sleep(3). } //MessageBox(0,TEXT(“消息”),TEXT(“消息”))
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“ ),MB_OK|MB_ICONINFORMATION). return 0. } void
GetScreenSize() {
ScreenWidth=GetSystemMetrics(SM_CXSCREEN).
ScreenHeight=GetSystemMetrics(SM_CYSCREEN). return . } void
CALLBACK TimerProc(HANDLE hWnd,UINT uMsg,UINT
idEvent,DWORD dwTime) { // MessageBox(0,TEXT(“消息
“ ),TEXT(“消息”),MB_OK|MB_ICONINFORMATION).
 srand((unsigned)time(NULL)). if(hTimer==0) {
MessageBox(0,TEXT(“创建定时器失败”),TEXT(“提示
“ ),MB_OK|MB_ICONINFORMATION). return . }
SetTimer(0,hTimer,((rand() 4)*500),(TIMERPROC)TimerProc).
//重设下次风向改变时间 //修改风向 if(CrWind!=0)
CrWind=0. else CrWind=rand()%3-1. return . } void
InitSnowNodes() { HDC hScreenDC=0. int j=0.
hScreenDC=CreateDC(“DISPLAY”,NULL,NULL,NULL).
if(hScreenDC==NULL) { MessageBox(0,“获取屏幕DC失败!”,
“信息”),MB_OK|MB_ICONERROR). return . }
 srand((unsigned)time(NULL)). for(j=0;j<SnowNumber;j) {
SnowNodes[j].postion.x=rand()%ScreenWidth.
SnowNodes[j].postion.y=rand()%ScreenHeight.
SnowNodes[j].iColor=GetPixel(hScreenDC,SnowNodes[j].postion
.x,SnowNodes[j].postion.y). SnowNodes[j].iSpeed=(rand()%5 1).
//每次下落距离(1-5)
SnowNodes[j].iStick=(30-rand()%SnowNodes[j].iSpeed). //粘贴
度(几次循环作一次粘贴连判断 // cout
SnowNodes[j].postion.x “ Y: “
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    SnowNodes[j].postion.y      endl. } DeleteDC(hScreenDC). }

void MoveSnowNodes() { // MessageBox(0,TEXT(“消息
“),TEXT(“消息”),MB_OK|MB_ICONINFORMATION).
HDC hScreenDC=0. srand((unsigned)time(NULL)). int
x=0,y=0,i=0. hScreenDC=CreateDC(“DISPLAY
“,NULL,NULL,NULL). if(hScreenDC==NULL) { MessageBox(0,
“获取屏幕DC失败!”,“信息”,MB_OK|MB_ICONERROR).
return . } // TextOut(hScreenDC,0,0,“虽然大检查顺顺藤摸瓜克
格勃呀加”,0). for(i=0;i<SnowNumber.i ) { //控制雪点下降速
度 if((CrStep%SnowNodes[i].iSpeed)!=0) continue. //恢复上次被
覆盖点
if((GetPixel(hScreenDC,SnowNodes[i].postion.x,SnowNodes[i].po
stion.y))==0xFFFFFFFF)
SetPixel(hScreenDC,SnowNodes[i].postion.x,SnowNodes[i].postio
n.y,SnowNodes[i].iColor). //根据几向作随机飘落
x=SnowNodes[i].postion.x rand()%3 CrWind.
y=SnowNodes[i].postion.y SnowNodes[i].iMove. //积雪 ( 停留 )
效果处理 if( ((CrStep%SnowNodes[i].iStick)==0) amp;
(GetPixel(hScreenDC,x,y))!=(GetPixel(hScreenDC,x,y 1))) amp;
((GetPixel(hScreenDC,x-1,y))!=(GetPixel(hScreenDC,x-1,y 1)))
amp; ((GetPixel(hScreenDC,x 1,y))!=GetPixel(hScreenDC,x 1,y 1))
) { //稍稍调整坐标
if(GetPixel(hScreenDC,x,y-1)==GetPixel(hScreenDC,x,y-2)) { y--.
} else {
if(GetPixel(hScreenDC,x,y-1)==GetPixel(hScreenDC,x,y-2)) y . x
=CrWind. } //画三个雪花点 SetPixel(hScreenDC,x,y,0xFFFFFFFF).
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SetPixel(hScreenDC,x 1,y 1,0XFFFFFF). SetPixel(hScreenDC,x-1,y  
1,0XFFFFFF). //重生雪点  
SnowNodes[i].postion.x=rand()%ScreenWidth.  
SnowNodes[i].postion.y=rand().  
SnowNodes[i].iColor=GetPixel(hScreenDC,SnowNodes[i].postion  
.x,SnowNodes[i].postion.y). } else { if( (x  0) || (x  ScreenWidth)  
|| (y  ScreenHeight)) { SnowNodes[i].postion.x=(rand()).  
SnowNodes[i].postion.y=(rand()%ScreenWidth).  
SnowNodes[i].iColor=GetPixel(hScreenDC,SnowNodes[i].postion  
.x,SnowNodes[i].postion.y). } else { //保存颜色并绘制雪点  
SnowNodes[i].iColor=GetPixel(hScreenDC,x,y).  
SetPixel(hScreenDC,x,y,0XFFFFFF). //此时保存新雪点位置  
SnowNodes[i].postion.x=x. SnowNodes[i].postion.y=y. } } }  
DeleteDC(hScreenDC). CrStep . } 100Test 下载频道开通 , 各类  
考试题目直接下载。 详细请访问 www.100test.com
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