// taypeDlg.cpp : implementation file

//

#include "stdafx.h"

#include "taype.h"

#include "taypeDlg.h"

#ifdef \_DEBUG

#define new DEBUG\_NEW

#undef THIS\_FILE

static char THIS\_FILE[] = \_\_FILE\_\_;

#endif

/////////////////////////////////////////////////////////////////////////////

// CTaypeDlg dialog

CTaypeDlg::CTaypeDlg(CWnd\* pParent /\*=NULL\*/)

 : CDialog(CTaypeDlg::IDD, pParent)

{

 //{{AFX\_DATA\_INIT(CTaypeDlg)

 m\_Resistencia = 0.0;

 m\_TemperaturaF = 0.0;

 m\_TemperaturaI = 0.0;

 m\_Aluminio = FALSE;

 m\_Hierro = FALSE;

 m\_Resultado = 0.0;

 //}}AFX\_DATA\_INIT

 // Note that LoadIcon does not require a subsequent DestroyIcon in Win32

 m\_hIcon = AfxGetApp()->LoadIcon(IDR\_MAINFRAME);

}

void CTaypeDlg::DoDataExchange(CDataExchange\* pDX)

{

 CDialog::DoDataExchange(pDX);

 //{{AFX\_DATA\_MAP(CTaypeDlg)

 DDX\_Text(pDX, IDC\_RESISTENCIA, m\_Resistencia);

 DDX\_Text(pDX, IDC\_TEMPERATURAF, m\_TemperaturaF);

 DDX\_Text(pDX, IDC\_TEMPERATURAI, m\_TemperaturaI);

 DDX\_Check(pDX, IDC\_ALUMINIO, m\_Aluminio);

 DDX\_Check(pDX, IDC\_HIERRO, m\_Hierro);

 DDX\_Text(pDX, IDC\_RESULTADO, m\_Resultado);

 //}}AFX\_DATA\_MAP

}

BEGIN\_MESSAGE\_MAP(CTaypeDlg, CDialog)

 //{{AFX\_MSG\_MAP(CTaypeDlg)

 ON\_WM\_PAINT()

 ON\_WM\_QUERYDRAGICON()

 ON\_BN\_CLICKED(IDC\_CALCULAR, OnCalcular)

 ON\_BN\_CLICKED(IDC\_SALIR, OnSalir)

 //}}AFX\_MSG\_MAP

END\_MESSAGE\_MAP()

/////////////////////////////////////////////////////////////////////////////

// CTaypeDlg message handlers

BOOL CTaypeDlg::OnInitDialog()

{

 CDialog::OnInitDialog();

 // Set the icon for this dialog. The framework does this automatically

 // when the application's main window is not a dialog

 SetIcon(m\_hIcon, TRUE); // Set big icon

 SetIcon(m\_hIcon, FALSE); // Set small icon

 // TODO: Add extra initialization here

 return TRUE; // return TRUE unless you set the focus to a control

}

// If you add a minimize button to your dialog, you will need the code below

// to draw the icon. For MFC applications using the document/view model,

// this is automatically done for you by the framework.

void CTaypeDlg::OnPaint()

{

 if (IsIconic())

 {

 CPaintDC dc(this); // device context for painting

 SendMessage(WM\_ICONERASEBKGND, (WPARAM) dc.GetSafeHdc(), 0);

 // Center icon in client rectangle

 int cxIcon = GetSystemMetrics(SM\_CXICON);

 int cyIcon = GetSystemMetrics(SM\_CYICON);

 CRect rect;

 GetClientRect(&rect);

 int x = (rect.Width() - cxIcon + 1) / 2;

 int y = (rect.Height() - cyIcon + 1) / 2;

 // Draw the icon

 dc.DrawIcon(x, y, m\_hIcon);

 }

 else

 {

 CDialog::OnPaint();

 }

}

// The system calls this to obtain the cursor to display while the user drags

// the minimized window.

HCURSOR CTaypeDlg::OnQueryDragIcon()

{

 return (HCURSOR) m\_hIcon;

}

void CTaypeDlg::OnCalcular()

{

 UpdateData(true);

 m\_Resultado= m\_Resistencia\*(1+0.00393\*(m\_TemperaturaF-m\_TemperaturaI));

 if(m\_Aluminio|| m\_Hierro )

{

if(m\_Aluminio)

{m\_Resultado = m\_Resistencia\*(1+0.0039\*(m\_TemperaturaF-m\_TemperaturaI));}

if(m\_Hierro)

{m\_Resultado= m\_Resistencia\*(1+0.005\*(m\_TemperaturaF-m\_TemperaturaI));}

}

if(m\_Aluminio & m\_Hierro)

m\_Resultado= m\_Resistencia\*(1+0.00393\*(m\_TemperaturaF-m\_TemperaturaI));

UpdateData(false);

}

void CTaypeDlg::OnSalir()

{

 this->DestroyWindow();

}