// Castillon JorgeDlg.cpp : implementation file

//

#include "stdafx.h"

#include "Castillon Jorge.h"

#include "Castillon JorgeDlg.h"

#include <math.h>

#ifdef \_DEBUG

#define new DEBUG\_NEW

#undef THIS\_FILE

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

#endif

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

// CCastillonJorgeDlg dialog

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

 : CDialog(CCastillonJorgeDlg::IDD, pParent)

{

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

 m\_CORRIENTE = 0.0;

 m\_RESISTENCIA = 0.0;

 m\_FACTOR = FALSE;

 m\_RESPUESTA = 0.0;

 m\_TRIFASICO = FALSE;

 //}}AFX\_DATA\_INIT

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

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

}

void CCastillonJorgeDlg::DoDataExchange(CDataExchange\* pDX)

{

 CDialog::DoDataExchange(pDX);

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

 DDX\_Text(pDX, IDC\_EDIT1, m\_CORRIENTE);

 DDX\_Text(pDX, IDC\_EDIT2, m\_RESISTENCIA);

 DDX\_Check(pDX, IDC\_Factor, m\_FACTOR);

 DDX\_Text(pDX, IDC\_Respuesta, m\_RESPUESTA);

 DDX\_Check(pDX, IDC\_TRIFASICO, m\_TRIFASICO);

 //}}AFX\_DATA\_MAP

}

BEGIN\_MESSAGE\_MAP(CCastillonJorgeDlg, CDialog)

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

 ON\_WM\_PAINT()

 ON\_WM\_QUERYDRAGICON()

 ON\_BN\_CLICKED(IDACEPTAR, OnAceptar)

 //}}AFX\_MSG\_MAP

END\_MESSAGE\_MAP()

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

// CCastillonJorgeDlg message handlers

BOOL CCastillonJorgeDlg::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 CCastillonJorgeDlg::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 CCastillonJorgeDlg::OnQueryDragIcon()

{

 return (HCURSOR) m\_hIcon;

}

void CCastillonJorgeDlg::OnAceptar()

{

 UpdateData(true);

m\_RESPUESTA=0.8 \* m\_RESISTENCIA \* m\_CORRIENTE;

if(m\_FACTOR || m\_TRIFASICO )

{

if(m\_FACTOR)

{m\_RESPUESTA = 0.9 \* m\_RESISTENCIA \* m\_CORRIENTE;}

if(m\_TRIFASICO)

{m\_RESPUESTA = 0.8 \* m\_RESISTENCIA \* m\_CORRIENTE \* sqrt(3);}

}

if(m\_FACTOR & m\_TRIFASICO)

{m\_RESPUESTA = 0.9 \* m\_RESISTENCIA \* m\_CORRIENTE \* sqrt(3);}

 UpdateData(false);

}