

MFC Classes.

CWnd		
Construction/ Destruction	CWnd();	Constructs a CWnd object.
	virtual BOOL DestroyWindow();	Destroys the attached Windows window.
Window Size and Position	void GetWindowRect(LPRECT lpRect) const;	Gets the screen coordinates of CWnd.
	void GetClientRect(LPRECT lpRect) const;	Gets the dimensions of the CWnd client area.
Update & Painting Functions	CDC* BeginPaint(LPPAINTSTRUCT lpPaint);	Prepares CWnd for painting.
	void EndPaint(LPPAINTSTRUCT lpPaint);	Marks the end of painting.
	CDC* GetDC();	Retrieves a display context for the client area.
	BOOL RedrawWindow(LPCRECT lpRectUpdate = NULL, CRgn* prgnUpdate = NULL, UINT flags = RDW_INVALIDATE RDW_UPDATENOW RDW_ERASE);	Updates the specified rectangle or region in the client area.
	int ReleaseDC(CDC* pDC);	Releases client and window device contexts, freeing them for use by other applications.
	void InvalidateRect(LPCRECT lpRect, BOOL bErase = TRUE);	Invalidates the client area within the given rectangle by adding that rectangle to the current update region.
	BOOL ShowWindow(int nCmdShow);	Shows or hides the window.
Timer Functions	UINT SetTimer(UINT nIDEvent, UINT nElapse, void (CALLBACK EXPORT* lpfnTimer)(HWND, UINT, UINT, DWORD));	Installs a system timer that sends a WM_TIMER message when triggered.
	BOOL KillTimer(int nIDEvent);	Kills a system timer.
General Message Handlers	afx_msg void OnClose();	Called as a signal that CWnd should be closed.
	afx_msg int OnCreate(LPCREATESTRUCT lpCreateStruct);	Called as a part of window creation.
	afx_msg void OnDestroy();	Called when CWnd is being destroyed.
	afx_msg void OnKillFocus(CWnd* pNewWnd);	Called immediately before CWnd loses the input focus.
	afx_msg void OnPaint();	Called to repaint a portion of the window.
	afx_msg void OnShowWindow(BOOL bShow, UINT nStatus);	Called when CWnd is to be hidden or shown.
Input Message Handlers	afx_msg void OnSize(UINT nType, int cx, int cy);	Called after the size of CWnd has changed.
	afx_msg void OnChar(UINT nChar, UINT nRepCnt, UINT nFlags);	Called when a keystroke translates to a nonsystem character.
	afx_msg void OnKeyDown(UINT nChar, UINT nRepCnt, UINT nFlags);	Called when a nonsystem key is pressed.
	afx_msg void OnKeyUp(UINT nChar, UINT nRepCnt, UINT nFlags);	Called when a nonsystem key is released.
	afx_msg void OnLButtonDblClk(UINT nFlags, CPoint point);	Called when the user double-clicks the left mouse button.
	afx_msg void OnLButtonDown(UINT nFlags, CPoint point);	Called when the user presses the left mouse button.
	afx_msg void OnLButtonUp(UINT nFlags, CPoint point);	Called when the user releases the left mouse button.
	afx_msg void OnMButtonDblClk(UINT nFlags, CPoint point);	Called when the user double-clicks the middle mouse button.
	afx_msg void OnMButtonDown(UINT nFlags, CPoint point);	Called when the user presses the middle mouse button.
	afx_msg void OnMButtonUp(UINT nFlags, CPoint point);	Called when the user releases the middle mouse button.
	afx_msg void OnMouseMove(UINT nFlags, CPoint point);	Called when the mouse cursor moves.
	afx_msg void OnMButtonDblClk(UINT nFlags, CPoint point);	Called when the user double-clicks the right mouse button.
	afx_msg void OnMButtonDown(UINT nFlags, CPoint point);	Called when the user presses the right mouse button.
	afx_msg void OnMButtonUp(UINT nFlags, CPoint point);	Called when the user releases the right mouse button.
CFrameWnd		
	virtual CDocument* GetActiveDocument();	Returns the active CDocument object.
	CView* GetActiveView() const;	Returns the active CView object.
CView		
	CDocument* GetDocument() const;	Returns the document associated with the view.
	BOOL DoPreparePrinting(CPrintInfo* pInfo);	Displays Print dialog box and creates printer device context; call when overriding the OnPreparePrinting member function.
	virtual void OnDraw(CDC* pDC)	Called to render an image of the document for screen display, printing, or print preview. Implementation required.
CDC		
Data members	m_hAttribDC	The attribute-device context used by this CDC object.
	m_hDC	The output-device context used by this CDC object.
Construction & Initialization	Constructs a CDC object.	Constructs a CDC object.
	BOOL CreateCompatibleDC(CDC* pDC);	Creates a memory-device context that is compatible with another device context. You can use it to prepare images in memory.
	BOOL CreateDC(LPCTSTR lpszDriverName, LPCTSTR lpszDeviceName, LPCTSTR lpszOutput, const void* lpInitData);	Creates a device context for a specific device.
	BOOL DeleteDC();	Deletes the Windows device context associated with this CDC object.
	CBitmap* GetCurrentBitmap() const;	Returns a pointer to the currently selected CBitmap object.
	CBrush* GetCurrentBrush() const;	Returns a pointer to the currently selected CBrush object.
	CFont* GetCurrentFont() const;	Returns a pointer to the currently selected CFont object.
	CPalette* GetCurrentPalette() const;	Returns a pointer to the currently selected CPalette object.
	CPen* GetCurrentPen() const;	Returns a pointer to the currently selected CPen object.
	CWnd* GetWindow() const;	Returns the window associated with the display device context.
Select Objects	CPen* SelectObject(CPen* pPen); CBrush* SelectObject(CBrush* pBrush); virtual CFont* SelectObject(CFont* pFont); CBitmap* SelectObject(CBitmap* pBitmap); int SelectObject(CRgn* pRgn);	Selects a GDI drawing object.
	virtual CGdiObject* SelectStockObject(int nIndex); nIndex = BLACK_BRUSH / DKGRAY_BRUSH / GRAY_BRUSH / HOLLOW_BRUSH / LTGRAY_BRUSH / NULL_BRUSH / WHITE_BRUSH / BLACK_PEN / NULL_PEN / WHITE_PEN	Selects one of the predefined stock pens, brushes, or fonts provided by Windows

Drawing-Attribute Functions	COLORREF GetBkColor() const;	Retrieves the current background color.
	virtual COLORREF SetBkColor(COLORREF crColor);	Sets the current background color.
	COLORREF GetTextColor() const;	Retrieves the current text color.
	virtual COLORREF SetTextColor(COLORREF crColor);	Sets the text color.
	int GetStretchBltMode() const;	Retrieves the current bitmap-stretching mode.
	int SetStretchBltMode(int nStretchMode);	Sets the bitmap-stretching mode.
Line-Output Functions	CPoint GetCurrentPosition() const;	Retrieves the current position of the pen (in logical coordinates).
	CPoint MoveTo(int x, int y); CPoint MoveTo(POINT point);	Moves the current position.
	BOOL LineTo(int x, int y); BOOL LineTo(POINT point);	Draws a line from the current position up to, but not including, a point.
	BOOL Arc(int x1, int y1,int x2,int y2,int x3, int y3, int x4, int y4); BOOL Arc(LPCRECT lpRect, POINT ptStart, POINT ptEnd);	Draws an elliptical arc.
	BOOL PolyDraw(const POINT* lpPoints, const BYTE* lpTypes, int nCount);	Draws a set of line segments and Bézier splines. This function updates the current position.
	BOOL Polyline(LPPOINT lpPoints, int nCount);	Draws a set of line segments connecting the specified points.
	BOOL PolyBezier(const POINT* lpPoints, int nCount);	Draws one or more Bézier splines. The current position is neither used nor updated.
Simple Drawing Functions	void FillRect(LPCRECT lpRect, CBrush* pBrush);	Fills a given rectangle by using a specific brush.
	void FrameRect(LPCRECT lpRect, CBrush* pBrush);	Draws a border around a rectangle.
	void FillSolidRect(LPCRECT lpRect, COLORREF clr);	Fills a rectangle with a solid color.
	void FillSolidRect(int x, int y, int cx, int cy, COLORREF clr);	
Bitmap Functions	BOOL BitBlt(int x, int y, int nWidth, int nHeight, CDC* pSrcDC, int xSrc, int ySrc, DWORD dwRop);	Copies a bitmap from a specified device context.
	BOOL StretchBlt(int x, int y, int nWidth, int nHeight, CDC* pSrcDC, int xSrc, int ySrc, int nSrcWidth, int nSrcHeight, DWORD dwRop);	Moves a bitmap from a source rectangle and device into a destination rectangle, stretching or compressing the bitmap if necessary to fit the dimensions of the destination rectangle.
	COLORREF GetPixel(int x, int y) const; COLORREF GetPixel(POINT point) const;	Retrieves the RGB color value of the pixel at the specified point.
	COLORREF SetPixel(int x, int y, COLORREF crColor); COLORREF SetPixel(POINT point, COLORREF crColor);	Sets the pixel at the specified point to the closest approximation of the specified color.
Text Functions	virtual BOOL TextOut(int x, int y, LPCTSTR lpszString, int nCount); BOOL TextOut(int x, int y, const CString& str);	Writes a character string at a specified location using the currently selected font.
	virtual int DrawText(LPCTSTR lpszString, int nCount, LPRECT lpRect, UINT nFormat); int DrawText(const CString& str, LPRECT lpRect, UINT nFormat);	Draws formatted text in the specified rectangle.
CBRUSH		
Construction	CBrush(); CBrush(COLORREF crColor); CBrush(int nIndex, COLORREF crColor); CBrush(CBitmap* pBitmap);	Constructs a CBrush object.
Initialization	BOOL CreateSolidBrush(COLORREF crColor);	Initializes a brush with the specified solid color.
	BOOL CreateHatchBrush(int nIndex, COLORREF crColor); HS_BDIAGONAL // HS_CROSS // HS_DIAGCROSS // HS_FDIAGONAL // HS_HORIZONTAL // HS_VERTICAL	Initializes a brush with the specified hatched pattern and color.
CPen		
Construction	CPen(); CPen(int nPenStyle, int nWidth, COLORREF crColor);	Constructs a CPen object.
Initialization	BOOL CreatePen(int nPenStyle, int nWidth, COLORREF crColor); BOOL CreatePen(int nPenStyle, int nWidth, const LOGBRUSH* pLogBrush, int nStyleCount = 0, const DWORD* lpStyle = NULL);	Creates a logical cosmetic or geometric pen with the specified style, width, and brush attributes, and attaches it to the CPen object.
CBitmap		
Construction	CBitmap();	Constructs a CBitmap object
Initialization	BOOL LoadBitmap(LPCTSTR lpszResourceName); BOOL LoadBitmap(UINT nIDResource);	Initializes the object by loading a named bitmap resource from the application's executable file and attaching the bitmap to the object.
	BOOL CreateBitmap(int nWidth, int nHeight, UINT nPlanes, UINT nBitcount, const void* lpBits);	Initializes the object with a device-dependent memory
Attributes	int GetBitmap(BITMAP* pBitMap);	Fills a BITMAP structure with information about the bitmap.
CDialog		
Construction	CDialog(LPCTSTR lpszTemplateName, CWnd* pParentWnd = NULL); CDialog(UINT nIDTemplate, CWnd* pParentWnd = NULL); CDialog();	Constructs a CDialog object.
Initializacion	BOOL Create(LPCTSTR lpszTemplateName, CWnd* pParentWnd = NULL); BOOL Create(UINT nIDTemplate, CWnd* pParentWnd = NULL);	Initializes the CDialog object. Creates a modeless dialog box and attaches it to the CDialog object.
Operations	virtual int DoModal();	Calls a modal dialog box and returns when done.
Overridables	virtual BOOL OnInitDialog();	Override to augment dialog-box initialization.
	virtual void OnSetFont(CFont* pFont);	Override to specify the font that a dialog-box control is to use when it draws text.
	virtual void OnOK();	Override to perform the OK button action in a modal dialog box. The default closes the dialog box and DoModal returns IDOK.
	virtual void OnCancel();	Override to perform the Cancel button or ESC key action. The default closes the dialog box and DoModal returns IDCANCEL.