Borland Graphics Interface (BGI) for Windows
Version 6.0, August 9, 2004
The following functions are mostly from the original Borland Graphics Interface
for DOS programs. The BGI graphics functions may also be used with Windows
programs created by the Borland 5.0 compiler, the free GNU C++ compiler, and
possibly other compilers. Extra Windows functions are also available, described
in www.cs.colorado.edu/~main/cs1300/doc/bgi/bgi.html. These extra functions are
indicated below by . Also, any of the functions that use colors can use RGB
colors in addition to the 16-color BGI palette.

Functions:

```
                 void arc (int x, int y, int stangle, int endangle, int radius);

                 void bar (int left, int top, int right, int bottom);
                 void bar3d (int left, int top, int right, int bottom, int depth,
int topflag);
        ostringstream bgiout;

                 void circle (int x, int y, int radius);
                 void cleardevice (void);
                 void clearmouseclick(int kind);
                 void clearviewport (void);
                 void closegraph (int window=ALL_WINDOWS);
                  int converttorgb (int color);

                 void delay (int millisec);
                 void detectgraph (int *graphdriver, int *graphmode);
                 void drawpoly (int numpoints, int *polypoints);

                 void ellipse (int x, int y, int stangle, int endangle, int
xradius, int yradius);

                 void fillellipse (int x, int y, int xradius, int yradius);
                 void fillpoly (int numpoints, int *polypoints);
                 void floodfill (int x, int y, int border);

                  int getactivepage (void);
                 void getarccoords (struct arccoordstype *arccoords);
                 void getaspectratio (int *xasp, int *yasp);
                  int getbkcolor (void);
                  int getch (void);
                  int getcolor (void);
                  int getcurrentwindow (void);
      struct palettetype* getdefaultpalette (void);
                  int getdisplaycolor (int color);
                 char* getdrivername (void);
                 void getfillpattern (char *pattern);
                 void getfillsettings (struct fillsettingstype *fillinfo);
                  int getgraphmode (void);
                 void getimage (int left, int top, int right, int bottom, void
*bitmap);
                 void getlinesettings (struct linesettingstype *lineinfo);
                  int getmaxcolor (void);
                  int getmaxmode (void);
                  int getmaxheight (void);
                  int getmaxwidth (void);
                  int getmaxx (void);
                  int getmaxy (void);
```

```
            char* getmodename (int mode_number);
             void getmoderange (int graphdriver, int *lomode, int *himode);
             void getmouseclick(int kind, int& x, int& y);
             void getpalette (struct palettetype *palette);
              int getpalettesize (void);
              int getpixel (int x, int y);
             void gettextsettings (struct textsettingstype *texttypeinfo);
             void getviewsettings (struct viewporttype *viewport);
              int getvisualpage (void);
              int getwindowheight (void);
              int getwindowwidth (void);
              int getx (void);
              int gety (void);
             void graphdefaults (void);
            char* grapherrormsg (int errorcode);
              int graphresult(void);

        unsigned imagesize (int left, int top, int right, int bottom);
             void initgraph (int *graphdriver, int *graphmode, char
*pathtodriver);
              int initwindow (int width, int height, const char*
title="Windows BGI", int left=0, int top=0, bool dbflag=false, bool
closeflag=true);
              int installuserdriver (char *name, int huge (*detect)(void));
              int installuserfont (char *name);
             bool ismouseclick(int kind);

              int kbhit (void);

             void line (int x1, int y1, int x2, int y2);
             void linerel (int dx, int dy);
             void lineto (int x, int y);

              int mousex (void);
              int mousey (void);
             void moverel (int dx, int dy);
             void moveto (int x, int y);

             void outtext (char *textstring);
             void outtextxy (int x, int y, char *textstring);

             void pieslice (int x, int y, int stangle, int endangle, int
radius);
             void printimage (
                    const char* title=NULL, double width_inches=7,
                    double border_left_inches=0.75, double
border_top_inches=0.75,
                    int left=0, int right=0, int right=INT_MAX, int
bottom=INT_MAX
                    );
             void putimage (int left, int top, void *bitmap, int op);
             void putpixel (int x, int y, int color);

             void readimagefile (
                    const char* filename=NULL,
                    int left=0, int top=0, int right=INT_MAX, int
bottom=INT_MAX
                    );
             void rectangle (int left, int top, int right, int bottom);
              int registerbgidriver (void (*driver)(void));
              int registerbgifont (void (*font)(void));
             void registermousehandler (int kind, void h(int, int));
             void restorecrtmode (void);
```

```
            RGB functions:
               COLOR(r,g,b),
               RED_VALUE(v), GREEN_VALUE(v), BLUE_VALUE(v),
               IS_BGI_COLOR(v), IS_RGB_COLOR(v)

         void sector (int x, int y, int stangle, int endangle, int
xradius, int yradius);
         void setactivepage (int page);
         void setallpalette (struct palettetype *palette);
         void setaspectratio (int xasp, int yasp);
         void setbkcolor (int color);
         void setcolor (int color);
         void setcurrentwindow (int window);
         void setmousequeuestatus(int kind, bool status=true);
         void setfillpattern (char *upattern, int color);
         void setfillstyle (int pattern, int color);
      unsigned setgraphbufsize (unsigned bufsize);
         void setgraphmode (int mode);
         void setlinestyle (int linestyle, unsigned upattern, int
thickness);
         void setpalette (int colornum, int color);
         void setrgbpalette (int colornum, int red, int green, int blue);
         void settextjustify (int horiz, int vert);
         void settextstyle (int font, int direction, int charsize);
         void setusercharsize (int multx, int divx, int multy, int divy);
         void setviewport (int left, int top, int right, int bottom, int
clip);
         void setvisualpage (int page);
         void setwritemode (int mode);
          int showerrorbox (const char *message);
          int swapbuffers (void);

          int textheight (char *textstring);
          int textwidth (char *textstring);

         void writeimagefile (

                const char* filename=NULL,
                double width_inches=7, double border_left_inches=0.75,
double border_top_inches=0.75,
                int left=0, int top=0, int right=INT_MAX, int
bottom=INT_MAX
                );
```