```
/*************
 Application: Inventry Management System Compiled on: Borland Turbo C++ 3.0
  Programmer: Geetika Mukhi
*************
#include <conio.h>
#include <stdio.h>
#include <stdlib.h>
#include <dos.h>
#include <graphics.h>
#include <string.h>
#define TRUE 1
#define FALSE 0
/* List of Global variables used in the application*/
                                                    /* To set colors for all message
int mboxbrdrclr,mboxbgclr,mboxfgclr;
boxes in the application*/
int menutxtbgclr,menutxtfgclr,appframeclr;
                                                    /* To set the frame and color's for
menu items's*/
                                                    /* To set color of section 1, the
int section1_symb,section1_bgclr,section1_fgclr;
region around the menu options*/
int section2_symb,section2_bgclr,section2_fgclr;
                                                    /* To set color of section 2, the
section on the right of the menu options*/
int fEdit;
int animcounter;
                                                    /* Main database structure*/
static struct struct_stock
{
  char itemcode[8];
  char itemname[50];
  float itemrate;
  float itemqty;
  int minqty;
                                                    /*Used for Reorder level, which is
the minimum no of stock*/
}inv_stock;
struct struct_bill
  char itemcode[8];
  char itemname[50];
  float itemrate;
  float itemqty;
float itemtot;
}item_bill[100];
char password[8];
const long int stocksize=sizeof(inv_stock);
                                              /*stocksize stores the size of the
struct_stock*/
float tot_investment;
                                              /*To count the no of items in the stock*/
int numItems;
                                              /*To allow mouse operations in the
int button,column,row;
application*/
                             /*To perform database file operations on "inv_stock.dat"*/
FILE *dbfp;
int main(void)
  float issued_qty;
  char userchoice,code[8];
  int flag,i,itemsold;
  float getInvestmentInfo(void);
  FILE *ft;
  int result;
```

```
getConfiguration();
  /* Opens & set 'dbfp' globally so that it is accessible from anywhere in the
application*/
  dbfp=fopen("d:\invstoc.dat","r+");
if(dbfp==NULL)
    clrscr();
    printf("\nDatabase does not exists.\nPress Enter key to create it. To exit, press
any other key.\n ");
    fflush(stdin);
    if(getch()==13)
      dbfp=fopen("d:\invstoc.dat","w+");
      printf("\nThe database for the application has been created.\nYou must restart
the application.\nPress any key to continue.\n");
      fflush(stdin);
      getch();
      exit(0);
    }
    else
    {
      exit(0);
    }
  /* Application control will reach here only if the database file has been opened
successfully*/
  if(initmouse()==0)
      messagebox(10,33, "Mouse could not be loaded.", "Error ", ' ', mboxbrdrclr, mboxbgclr,
mboxfgclr,0);
  showmouseptr();
  _setcursortype(_NOCURSOR);
  while(1)
  {
    clrscr();
    fEdit=FALSE;
    ShowMenu();
    numItems=0;
    rewind(dbfp);
    /* To calculate the number of records in the database*/
    while(fread(&inv_stock, stocksize, 1, dbfp) == 1)
      ++numItems;
    textcolor(menutxtfgclr);
    textbackground(menutxtbgclr);
    gotopos(23,1);
cprintf("Total Items in Stock: %d",numItems);
    textcolor(BLUE);
    textbackground(BROWN);
    fflush(stdin);
    /*The application will wait for user response */
    userchoice=getUserResponse();
    switch(userchoice)
      /* To Close the application*/
case '0':
    BackupDatabase(); /*Backup the Database file to secure data*/
    flushall();
    fclose(dbfp);
    fcloseall();
    print2screen(12,40, "Thanks for Using the application.", BROWN, BLUE, 0);
    sleep(1);
    setdefaultmode();
    exit(0);
      /* To Add an item*/
```

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case '1':
    if(getdata()==1)
    {
      fseek(dbfp,0,SEEK_END);
/*Write the item information into the database*/
      fwrite(&inv_stock, stocksize, 1, dbfp);
      print2screen(13,33,"The item has been successfully added. ",BROWN,BLUE,0);
      getch();
    }
      break:
      /* To edit the item information*/
case '2':
    print2screen(2,33,"Enter Item Code>",BROWN,BLUE,0);gotopos(2,54);fflush(stdin);
    scanf("%s",&code);
    fedit=TRUE
    if(CheckId(code)==0)
      if(messagebox(0,33,"Press Enter key to edit the item.","Confirm",' ',mboxbrdrclr,
mboxbgclr,mboxfgclr,0)!=13)
          messagebox(10,33,"The item information could not be modified. Please try
again.", "Edit ", ' ', mboxbrdrclr, mboxbgclr, mboxfgclr, 0);
          fedit=FALSE;
          break;
      fedit=TRUE;
      getdata();
      fflush(stdin);
      fseek(dbfp,-stocksize,SEEK_CUR);
      fwrite(&inv_stock,stocksize,1,dbfp);
    }
    else
      messagebox(10,33,"The item is not available in the database.", "No records found",
   ,mboxbrdrclr,mboxbqclr,mboxfqclr,0);
      fEdit=FALSE;
      break;
      /* To show information about an an Item*/
    print2screen(2,33,"Enter Item Code: ",BROWN,BLUE,0);gotopos(2,55);fflush(stdin);
    scanf("%s",&code);
    flag=0
    rewind(dbfp);
    while(fread(&inv_stock, stocksize, 1, dbfp) == 1)
      if(strcmp(inv_stock.itemcode,code)==0)
         DisplayItemInfo();
         flag=1;
      }
    if(flag==0)
      messagebox(10,33,"The item is not available.", "No records found ",' ',mboxbrdrclr,
mboxbgclr,mboxfgclr,0);
      break;
      /* To show information about all items in the database*/ case '4':
    if(numItems==0)
      messagebox(10,33,"No items are available. ","Error ",' ',mboxbrdrclr,mboxbgclr,
mboxfgclr,0);
    textcolor(BLUE);
    textbackground(BROWN);
    gotopos(3,33);
    cprintf("Number of Items Available in Stock: %d",numItems);
    gotopos(4,33);
    getInvestmentInfo();
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cprintf("Total Investment :Rs.%.2f",tot_investment);
gotopos(5,33);
cprintf("Press Enter To View. Otherwise Press Any Key...");fflush(stdin);
     if(getch()==13)
       rewind(dbfp);
       while(fread(&inv_stock,stocksize,1,dbfp)==1); /*List All records*/
         DisplayItemRecord(inv_stock.itemcode);
    textcolor(BLUE):
       break:
       /* To issue Items*/
case '5':
         itemsold=0;
         i=0:
    top:
    print2screen(3,33,"Enter Item Code: ",BROWN,BLUE,0);fflush(stdin);gotopos(3,55);
    scanf("%s",&code);
if(CheckId(code)==1)
       if(messagebox(10,33,"The item is not available.","No records found ".' '.
mboxbrdrclr,mboxbqclr,mboxfqclr,0)==13)
         goto top;
       else
        goto bottom;
    rewind(dbfp);
    while(fread(&inv_stock, stocksize, 1, dbfp) == 1)
       if(strcmp(inv_stock.itemcode,code)==0) /*To check if the item code is available
in the database*/
          issued_qty=IssueItem();
          if(issued_qty > 0)
          {
             itemsold+=1;
             strcpy(item_bill[i].itemcode,inv_stock.itemcode);
strcpy(item_bill[i].itemname,inv_stock.itemname);
             item_bill[i].itemqty=issued_qty;
item_bill[i].itemrate=inv_stock.itemrate;
             item_bill[i].itemtot=inv_stock.itemrate*issued_qty;
             1+=1:
          }
          print2screen(19,33,"Would you like to issue another item(Y/N)?",BROWN,BLUE,0);
fflush(stdin);gotopos(19,45);
          if(toupper(getch())=='Y')
             goto top;
          bottom:
          break;
       }
    }
       break;
       /* Items to order*/
       case '6':
    if(numItems<=0)</pre>
       messagebox(10,33,"No items are available. ","Items Not Found ",' ',mboxbrdrclr,
mboxbgclr,mboxfgclr,0);
       break;
    print2screen(3,33,"Stock of these items is on the minimum level:",BROWN,RED,0);
fflush(stdin);
    flag=0;
    fflush(stdin);
    rewind(dbfp);
    while(fread(&inv_stock, stocksize, 1, dbfp) == 1)
    {
       if(inv_stock.itemqty <= inv_stock.minqty)</pre>
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```
DisplayItemInfo();
            flag=1;
         }
      if(flag==0)
         messagebox(10,33,"No item is currently at reorder level.", "Reorder Items", ' '
mboxbrdrclr,mboxbgclr,mboxfgclr,0);
         break:
         default:
      messagebox(10,33,"The option you have entered is not available.", "Invalid Option",
     ,mboxbrdrclr,mboxbgclr,mboxfgclr,0);
         break;
  }
/*Display Menu & Skins that the user will see*/
ShowMenu()
      if(section1_bqclr != BROWN || section1_symb != ' ')
         fillcolor(2,1,23,39,section1_symb,section1_bgclr,section1_fgclr,0);
      if(section2_bgclr != BROWN || section2_symb !=
     fillcolor(2,40,23,79,section2_symb,section2_bgclr,section2_fgclr,0);
print2screen(2,2,"1: Add an Item",menutxtbgclr,menutxtfgclr,0);
print2screen(4,2,"2: Edit Item Information",menutxtbgclr,menutxtfgclr,0);
print2screen(6,2,"3: Show Item Information",menutxtbgclr,menutxtfgclr,0);
print2screen(8,2,"4: View Stock Report",menutxtbgclr,menutxtfgclr,0);
print2screen(10,2,"5: Issue Items from Stock",menutxtbgclr,menutxtfgclr,0);
print2screen(12,2,"6: View Items to be Ordered ",menutxtbgclr,menutxtfgclr,0);
print2screen(14,2,"0: Close the application",menutxtbgclr,menutxtfgclr,0);
     htskin(0,0,' ',80,appframeclr,LIGHTGREEN,0);
     vtskin(0,0,' ',24,appframeclr,LIGHTGREEN,0);
vtskin(0,79,' ',24,appframeclr,LIGHTGREEN,0);
htskin(24,0,' ',80,appframeclr,LIGHTGREEN,0);
vtskin(0,31,' ',24,appframeclr,LIGHTGREEN,0);
     htskin(1,0,' ',80,appframeclr,LIGHTGREEN,0); vtskin(0,0,' ',24,appframeclr,LIGHTGREEN,0);
      return;
}
/*Wait for response from the user & returns choice*/
getUserResponse()
   int ch, i;
  animcounter=0;
   while(!kbhit())
      getmousepos(&button,&row,&column);
      /*To show Animation*/
      BlinkText(0,27,"Inventory Management System",1,YELLOW, RED, LIGHTGRAY,0,50);
      animcounter+=1;
      i++;
      if(button==1 && row==144 && column>=16 && column<=72) /*Close*/
         return('0');
      if(button==1 \&\& row==16 \&\& column>=16 \&\& column<=136)
                                                                                         /*Add New Item*/
         return('1')
                                                                                         /*Edit Item*/
      if(button==1 \&\& row==32 \&\& column>=16 \&\& column<=144)
         return('2<sup>-</sup>)
      if(button==1 \&\& row==48 \&\& column>=16 \&\& column<=160)
                                                                                        /*Show an Item*/
         return('3');
      if(button==1 && row==64 && column>=16 && column<=104) /*Stock Report*/
         return('4'):
      if(button==1 && row==80 && column>=16 && column<=144) /*Issue an Item*/
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return('5');
    if(button==1 && row==96 && column>=16 && column<=152) /*Items to order*/
      return('6');
  ch=qetch();
  return ch;
}
/*Reads a valid id and its information,returns 0 if id already exists*/
getdata()
  char tmp[8];
  float tst;
  _setcursortype(_NORMALCURSOR);
  print2screen(3,33,"Enter Item Code: ",BROWN,BLUE,0);fflush(stdin);gotopos(3,53);
  scanf("%s",&tmp);
if(CheckId(tmp)==0 && fEdit == FALSE)
    messagebox(10,33,"The id already exists. ","Error ",' ',mboxbrdrclr,mboxbgclr,
mboxfgclr,0);
    return 0;
                                    /*Means got a correct_item code*/
  strcpy(inv_stock.itemcode,tmp);
  print2screen(4,33,"Name of the Item: ",BROWN,BLUE,0);fflush(stdin);gotopos(4,53);
  gets(inv_stock.itemname);
  print2screen(5,33,"Price of Each Unit: ",BROWN,BLUE,0);fflush(stdin);gotopos(5,53);
  scanf("%f",&inv_stock.itemrate);
  print2screen(6,33,"Quantity:
                                  ,BROWN,BLUE,0);fflush(stdin);gotopos(6,53);
  scanf("%f",&inv_stock.itemqty);
  print2screen(7,33, "Reorder Level: ",BROWN,BLUE,0);fflush(stdin);gotopos(7,53);
  scanf("%d",&inv_stock.minqty);
  _setcursortype(_NOCURSOR);
 return 1;
}
/*Returns O if the id already exists in the database, else returns 1*/
int CheckId(char item[8])
  rewind(dbfp);
 while(fread(&inv_stock,stocksize,1,dbfp)==1)
    if(strcmp(inv_stock.itemcode,item)==0)
      return(0);
  return(1);
/*Displays an Item*/
DisplayItemRecord(char idno[8])
 rewind(dbfp);
 while(fread(&inv_stock,stocksize,1,dbfp)==1)
   if(strcmp(idno,inv_stock.itemcode)==0)
     DisplayItemInfo();
 return;
/*Displays an Item information*/
DisplayItemInfo()
  int r=7;
  textcolor(menutxtfqclr);
  textbackground(menutxtbgclr);
 gotopos(r,33);
cprintf("Item Code: %s","
                                                                ");
  gotopos(r,33);
  cprintf("Item Code: %s",inv_stock.itemcode);
  gotopos(r+1,33);
  cprintf("Name of the Item: %s","
                                                                  ");
  gotopos(r+1,33);
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cprintf("Name of the Item: %s",inv_stock.itemname);
  gotopos(r+2,33);
  cprintf("Price of each unit: %.2f","
                                                                   ");
  gotopos(r+2,33);
cprintf("Price of each unit: %.2f",inv_stock.itemrate);
  gotopos(r+3,33);
  cprintf("Quantity in Stock: %.4f","
                                                                    ");
  gotopos(r+3,33);
  cprintf("Quantity in Stock: %.4f",inv_stock.itemqty);
  aotopos(r+4,33);
  cprintf("Reorder Level: %d"."
                                                                    ");
  gotopos(r+4,33);
cprintf("Reorder Level: %d",inv_stock.minqty);
  gotopos(r+5,33);
cprintf("\nPress Any Key...");fflush(stdin);getch();
  textbackground(BROWN);
  textcolor(BLUE);
  return;
}
/*This function will return O if an item cannot issued. else issues the item*/
IssueItem()
{
  float issueqnty;
  DisplayItemInfo();
  print2screen(15,33,"Enter Quantity: ",BROWN,BLUE,0);fflush(stdin);gotopos(15,49);
scanf("%f",&issueqnty);
  /*If the stock of the item is greater than minimum stock*/
  if((inv_stock.itemqty - issueqnty) >= inv_stock.minqty)
    textcolor(BLUE);
    textbackground(BROWN);
    qotopos(18,33);
    cprintf("%.4f Item(s) issued.",issueqnty);
    gotopos(19,33);
    cprintf("You should pay RS. %.2f",issueqnty*inv_stock.itemrate);getch();
    textcolor(BLUE);
    inv_stock.itemqty-=issueqnty;
                                                  /*Updating quantity for the item in
stock*/
    fseek(dbfp,-stocksize,SEEK_CUR);
    fwrite(&inv_stock, stocksize, 1, dbfp);
    return issueqnty;
  /* If the stock of the item is less than minimum stock.ie Reorder level*/
  else
    messagebox(10,33,"Insufficient quantity in stock.", "Insufficient Stock", '',
mboxbrdrclr,mboxbgclr,mboxfgclr,0);
    gotopos(17,33);
    textcolor(BLUE);
    textbackground(BROWN);
    cprintf("ONLY %.4f pieces of the Item can be issued.",inv_stock.itemqty-inv_stock.
mingty);
    gotopos(18,33);
    cprintf("Press Any Key...");getch();
    textcolor(BLUE);
    textbackground(BROWN);
    return 0;
  }
}
/* Calculates the total investment amount for the stock available*/
float getInvestmentInfo(void)
   tot_investment=0;
   rewind(dbfp);
   while(fread(&inv_stock, stocksize, 1, dbfp) == 1)
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tot_investment+=(inv_stock.itemrate*inv_stock.itemqty);
    return tot_investment;
}
/* Creates a backup file "Bakckup" of "inv_stock.dat"*/
BackupDatabase(void)
  FILE *fback;
  fback=fopen("d:/Backup.dat","w");
  rewind(dbfp);
  while(fread(&inv_stock,stocksize,1,dbfp)==1)
    fwrite(&inv_stock, stocksize, 1, fback);
  fclose(fback);
  return;
}
/*This structure is used color settings for the application*/
struct colors
  char cfg_name[10];
  int mboxbrdrclr;
  int mboxbgclr;
  int mboxfgclr;
  int menutxtbgclr;
  int menutxtfgclr;
  int appframeclr;
  int section1_symb;
  int section1_bgclr;
  int section1_fgclr;
  int section2_symb;
  int section2_bgclr;
  int section2_fgclr;
}clr;
const long int clrsize=sizeof(clr);
/* Gets the display configuration for the application*/
getConfiguration()
  FILE *flast;
  flast=fopen("lastcfg","r+");
  if(flast==NULL)
    SetDefaultColor();
    return 0;
  rewind(flast);
  /*Reads the first record.*/
  fread(&clr,clrsize,1,flast);
#ifdef OKAY
  if(strcmp(clr.cfg_name, "lastclr")!=0)
    SetDefaultColor();
    fclose(flast);
    return 0;
#endif
     mboxbrdrclr=clr.mboxbrdrclr;mboxbgclr=clr.mboxbgclr;mboxfgclr=clr.mboxfgclr;
     menutxtbgclr=clr.menutxtbgclr;menutxtfgclr=clr.menutxtfgclr;appframeclr=clr.
appframeclr;
     section1_symb=clr.section1_symb;section1_bgclr=clr.section1_bgclr;section1_fgclr=
clr.section1_fgclr;
     section2_symb=clr.section2_symb;section2_bgclr=clr.section2_bgclr;section2_fgclr=
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clr.section2_fgclr;
     fclose(flast);
     return 1;
}
/* Sets the default color settings for the application*/
SetDefaultColor()
  mboxbrdrclr=BLUE,mboxbqclr=GREEN,mboxfqclr=WHITE;
  menutxtbgclr=BROWN, menutxtfgclr=BLUE, appframeclr=CYAN;
                     ', section1_bgclr=BROWN, section1_fgclr=BLUE;
  section1_symb='
  section2_symb='
                      ,section2_bgclr=BROWN,section2_fgclr=BLUE;
  return 1;
/* Adds animation to a text */
BlinkText(const int r,const int c,char txt[],int bgclr,int fgclr,int BGCLR2,int FGCLR2, int blink,const int dly)
  int len=strlen(txt);
  BGCLR2=bgclr; FGCLR2=BLUE;
  htskin(r,c,' ',len,bgclr,bgclr,0);
  print2screen(r,c,txt,bgclr,fgclr,blink);
    write2screen(r,c+animcounter+1,txt[animcounter],BGCLR2,FGCLR2,0);
    write2screen(r, c+animcounter+2, txt[animcounter+1], BGCLR2, FGCLR2,0);
    write2screen(r,c+animcounter+3,txt[animcounter+2],BGCLR2,FGCLR2,0);
write2screen(r,c+animcounter+4,txt[animcounter+3],BGCLR2,FGCLR2,0);
write2screen(r,c+animcounter+5,txt[animcounter+4],BGCLR2,FGCLR2,0);
    write2screen(r,c+animcounter+6,txt[animcounter+5],BGCLR2,FGCLR2,0);
    delay(dly*2);
    write2screen(r,c+animcounter+1,txt[animcounter],bgclr,fgclr,0);
    write2screen(r,c+animcounter+2,txt[animcounter+1],bgc]r,fgc]r,0);
    write2screen(r,c+animcounter+3,txt[animcounter+2],bgc]r,fgc]r,0);
    write2screen(r,c+animcounter+4,txt[animcounter+3],bgclr,fgclr,0);
    write2screen(r,c+animcounter+5,txt[animcounter+4],bgclr,fgclr,0);
    write2screen(r,c+animcounter+6,txt[animcounter+5],bqclr,fqclr,0);
    animcounter+=1;
    if(animcounter+5 >= len) animcounter=0;
  return;
}
/* Displays a single charector with its attrribute*/
write2screen(int row,int col,char ch,int bg_color,int fg_color,int blink)
  int attr;
  char far *v;
char far *ptr=(char far*)0xB8000000;
  if(blink!=0)
    blink=128;
  attr=bg_color+blink;
  attr=attr<<4;
  attr+=fg_color;
  attr=attr|blink;
  v=ptr+row*160+col*2; /*Calculates the video memory address corresponding to row &
column*/
  *v=ch;
  V++;
  *v=attr;
  return 0;
}
```

```
/* Prints text with color attribute direct to the screen*/
print2screen(int row,int col,char string[],int bg_color,int fg_color,int blink)
  int i=row,j=col,strno=0,len;
  len=strlen(string);
 while(j<80)</pre>
      if(j==79)
    i=0:
    i+=1;
      }
      write2screen(i,j,string[strno],bg_color,fg_color,blink); /*See below function*/
      if(strno > len-1)
    break;
  }
  return;
}
/* Prints text horizondally*/
htskin(int row,int column,char symb,int no,int bg_color,int fg_color,int blink)
  int i;
  for(i=0;i<no;i++)</pre>
     write2screen(row,column++,symb,bq_color,fq_color,blink);
                                                                   /*Print one symbol*/
}
/*Print text vertically*/
vtskin(int row,int column,char symb,int no,int bg_color,int fg_color,int blink)
  int i;
  for(i=0;i<no;i++)</pre>
    write2screen(row++,column,symb,bg_color,fg_color,blink); /*Print one symbol*/
  return;
}
/* Shows a message box*/
messagebox(int row,int column,char message[50],char heading[10],char symb,int borderclr,
int bg_color,int fg_color,int blink)
{
 int len;
  char key,image[1000];
  len=strlen(message);
  capture_image(row,column,row+3,column+len+7,&image);
  draw_mbox(row,column,row+3,column+len+7,symb,symb,borderclr,YELLOW,blink,borderclr,
YELLOW, blink);
  fillcolor(row+1,column+1,row+2,column+len+6,' ',bg_color,bg_color,0);
  print2screen(row+1,column+2,message,bg_color,fg_color,blink);
  print2screen(row+2,column+2,"Press Any Key...
                                                   ,bg_color,fg_color,blink);
  print2screen(row,column+1,heading,borderclr,fg_color,blink);
  sound(400):
  delay(200);
  nosound();
  fflush(stdin);
  key=getch();
  put_image(row,column,row+3,column+len+7,&image);
  return key;
}
/* Fills color in a region*/
fillcolor(int top_row,int left_column,int bottom_row,int right_column,char symb,int
bq_color,int fq_color,int blink)
{
  int i,j;
  for(i=top_row;i<=bottom_row;i++)</pre>
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htskin(i,left_column,symb,right_column-left_column+1,bg_color,fg_color,blink);
  return;
}
/* Prints a message box with an appropriate message*/
draw_mbox(int trow,int tcolumn,int brow,int bcolumn,char hsymb,char vsymb,int hbg_color,
int hfg_color,int hblink,int vbg_color,int vfg_color,int vblink)
  htskin(trow,tcolumn,hsymb,bcolumn-tcolumn,hbg_color,hfg_color,hblink);
  htskin(brow,tcolumn,hsymb,bcolumn-tcolumn,hbg_color,hfg_color,hblink);
  vtskin(trow,tcolumn,vsymb,brow-trow+1,vbg_color,vfg_color,vblink);
  vtskin(trow,bcolumn,vsymb,brow-trow+1,vbg_color,vfg_color,vblink);
  return;
/* Copies the txt mode image below the messagebox*/
capture_image(int toprow,int leftcolumn,int bottomrow,int rightcolumn,int *image)
  char far *vidmem;
  int i,j,count;
  count=0;
  for(i=toprow;i<=bottomrow;i++)</pre>
    for(j=leftcolumn;j<=rightcolumn;j++)</pre>
      vidmem=(char far*)0xB8000000+(i*160)+(j*2); /*Calculates the video memory
address corresponding to row & column*/
      image[count]=*vidmem;
      image[count+1]=*(vidmem+1);
      count+=2;
    }
    return;
}
/* Places an image on the screen*/
put_image(int toprow.int leftcolumn.int bottomrow.int rightcolumn.int image[])
  char far *ptr=(char far*)0xB8000000;
char far *vid;
int i,j,count;
  count=0;
  for(i=toprow;i<=bottomrow;i++)</pre>
    for(j=leftcolumn;j<=rightcolumn;j++)</pre>
      vid=ptr+(i*160)+(j*2); /*Calculates the video memory address corresponding to
row & column*/
      *vid=image[count];
      *(vid+1)=image[count+1];
      count+=2;
    return;
}
/* To move the curser position to derired position*/
gotopos(int r,int c)
  union REGS i,o;
  i.h.ah=2;
  i.h.bh=0;
  i.h.dh=r;
  i.h.dl=c;
  int86(16,&i,&o);
  return 0;
union REGS i,o;
/* Initialize the mouse*/
```

```
initmouse()
{
  i.x.ax=0;
  int86(0x33,&i,&o);
  return(o.x.ax);
/* Shows the mouse pointer*/
showmouseptr()
  i.x.ax=1;
  int86(0x33,&i,&o);
  return;
getmousepos(int *button,int *x,int *y)
{
  i.x.ax=3;
  int86(0x33,&i,&o);
  *button=o.x.bx;
  *x=o.x.dx;
  *y=0.x.cx;
  return 0;
}
/* Restores the default text mode*/
setdefaultmode()
  set25x80();
  setdefaultcolor();
  return;
/* Sets the default color and cursor of screen*/
setdefaultcolor()
  int i;
char far *vidmem=(char far*)0xB8000000;
  window(1,1,80,25);
  clrscr()
  for (i=1;i<4000;i+=2)
   *(vidmem+i)=7;</pre>
_setcursortype(_NORMALCURSOR);
return;
}
/* Sets 25x80 Text mode*/
set25x80()
  asm mov ax,0x0003;
  asm int 0x10;
  return;
}
```

Database does not exists.

Press Enter key to create it. To exit, press any other key.

Database does not exists.

Press Enter key to create it. To exit, press any other key.

The database for the application has been created.

You must restart the application.

Press any key to continue.



- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Name of the Item: Desktop computers

Price of Each Unit:450

Quantity: 2

Reorder Level: 4

The item has been successfully added.



- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code> 300 Enter Item Code: 200

Name of the Item: Desktop Computers

Price of Each Unit:450

Quantity: 2

Reorder Level: 3

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 2.0000

Reorder Level: 3889

Press Any Key...

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Number of Items Available in Stock: 1 Total Investment :Rs.900.00 Press Enter To View. Otherwise Press Any Key..



- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Number of Items Available in Stock: 1

Total Investment :Rs.900.00

Press Enter To View. Otherwise Press Any Key.

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 2.0000

Reorder Level: 3889

Press Any Key...

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 2.0000

Reorder Level: 3889

Press Any Key...



- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 2.0000

Reorder Level: 3889

Press Any Key...

Enter Quantity:1

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00

Insufficient Stock
Insufficient quantity in stock.
Press Any Key...

Enter Quantity:1

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 6.0000

Reorder Level: 2889

Press Any Key...

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 6.0000

Reorder Level: 2889

Press Any Key...

Enter Quantity:2

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 6.0000

Reorder Level: 2889

Press Any Key...

Enter Quantity:2

2.0000 Item(s) issued. You should pay RS. 900.00

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Enter Item Code: 200

Item Code: 200

Name of the Item: Desktop Computers

Price of each unit: 450.00 Quantity in Stock: 6.0000

Reorder Level: 2889

Press Any Key...

Enter Quantity:2

2.0000 Item(s) issued. YWould you like to issue another item(Y/N)?

- 1: Add an Item
- 2: Edit Item Information
- 3: Show Item Information
- 4: View Stock Report
- 5: Issue Items from Stock
- 6: View Items to be Ordered
- 0: Close the application

Stock of these items is on the minimum level:

Item Code: 200

Name of the Item: 0

Price of each unit: 456.00 Quantity in Stock: 4.0000

Reorder Level: 5889

Press Any Key...