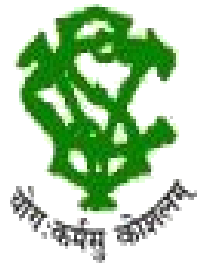


***A Project Report On***

# **THE WORD GAME**

(in C++)



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## **HEADER FILES USED**

1. GRAPHICS.H – for graphics
2. FSTREAM.H – for file handling, cin and cout
3. PROCESS.H – for exit() function
4. CONIO.H – for clrscr(), getch(), cprintf() & textcolor() functions
5. STDIO.H – for standard I/O operations
6. STRING.H – for string handling
7. DOS.H– for delay() function
8. CTYPE.H- for toupper() function

## **FILES GENERATED**

### **DATA FILES**

WINNER.TXT

### **PROGRAM FILE**

WORD\_GAME.CPP

## WORKING DESCRIPTION

This program is designed for any-one to pass his/her time & increase the vocabulary. This program consists of SIX options as follows -

1. **WELCOME – MAIN MENU**
2. **PLAY NEW GAME**
3. **ABOUT THE GAME**
4. **WINNERS' LIST**
5. **SUMMERY**
6. **EXIT**

## CODING

/\* THE WORD-GAME \*/

/\* HEADER FILES' INCLUSION \*/

//Submitted by: Ravi Prakash

#include<graphics.h>

#include<fstream.h>

#include<conio.h>

#include<string.h>

#include<process.h>

#include<stdio.h>

#include<dos.h>

#include<ctype.h>

/\* PROTOTYPE DECLEARATION \*/

void play(); // To play game

int tell(int); // To check the repeation of word

void selection(int); // User's selection (logic)

void about(); // Introduction to the game

void credit(); // About the developer

void winner(); // Last 5 winners

void summery(int,int); // Summery of words entered by players

void win\_update(char Winner[25]);

**/\* CLASS \*/**

**/\* FOR MAIN-MENU \*/**

```
class Begin
{
    private:
        char option;

    public:
        void Menu()
        {
            int gd=DETECT,gm;
            initgraph(&gd,&gm,"\\TURBOC3\\BGI");
            setbkcolor(RED);
            setcolor(GREEN);
            rectangle(50,100,600,300);

            setcolor(BLUE);
            settextstyle(GOTHIC_FONT,HORIZ_DIR,5);
            outtextxy(180,20,"MAIN-MENU");
            cout<<endl<<endl<<endl<<endl<<endl<<endl;
            settextstyle(TRIPLEX_FONT,HORIZ_DIR,2);
            setcolor(WHITE);
            outtextxy(130,120,"1 Play");
            outtextxy(130,140,"2 About");
```

```
outtextxy(130,160,"3 Credit");
outtextxy(130,180,"4 Winners");
outtextxy(130,200,"5 Exit");
```

```
settextstyle(DEFAULT_FONT,HORIZ_DIR,1);
outtextxy(130,260,"• Enter your choice(1-5): ");
gotoxy(45,17);
cin>>option;
```

```
selection(option);
clrscr();
}
```

```
void Choice(char a)
{
    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    if(a!='0')
    {
        clrscr();
        Menu();
    }
    else
    {
        clrscr();
        setbkcolor(RED);
```

```
        cout<<"\n\tThanks for giving a look.";
        delay(2000);
        exit(0);
    }
}
}Main;
```

**/\* GLOBAL VARIABLES' DECLEARATION \*/**

```
char p1[80],p2[80],word[80][80];
```

**/\* THE MAIN FUNCTION \*/**

```
void main()
{
    clrscr();

    Main.Menu();

    getch();

}
```

**/\* SWITCH FOR USER PREFERANCE (LOGIC) FOR MENU \*/**

```
void selection(char a)
```

```
{
int gd=DETECT,gm;
initgraph(&gd,&gm,"\\TURBOC3\\BGI");
do
{
switch(a)
{
case '1': play();
break;
case '2': about();
break;
case '3': credit();
break;
case '4': winner();
break;
case '5':{
clrscr();
setbkcolor(RED);
cout<<"\n\tThanks for giving a look.";
delay(2000);
exit(0);
}
break;
default: {
clrscr();
setbkcolor(RED);
```



```

        cout<<"\n\n\tSorry! It seems that you have "
            <<"entered an incorrect key!!"
            <<"\n\tWe should get exit...";
        delay(4500);
        exit(0);
    }
}
}while(a!=4);
}

```

/\* TO PLAY/START NEW GAME \*/

```

void play()
{
    clrscr();

    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    setbkcolor(RED);
    setcolor(BLUE);

    int j,x,i,num=0;

    settextstyle(COMPLEX_FONT,HORIZ_DIR,5);
    outtextxy(60,20,"Rules:-");
    line(60,70,220,70);
}

```

```

        cout<<"\n\n\n\n\n\t\b";

        setcolor(GREEN);
        line(120,200,500,200);
        cout<<"\n\t1) Players must have to enter the word within "
        <<"a fixed time-limit i.e. \n\t 30 seconds.";
        cout<<"\n\t2) One who leaves game first would be"
        <<"considered defeated.";
        cout<<"\n\t3) Player can accept defeat by entering \'*\'' "
        <<"instead of the word.";
        cout<<"\n\t4) All words must be in small letter.";
        cout<<"\n\t\t\t\t\t";

```

```

        cout<<"\tPress any key to proceed.";
        getch();
        clrscr();

```

```

gd=DETECT,gm;
initgraph(&gd,&gm,"\\TURBOC3\\BGI");
setbkcolor(RED);

```

```

int e,d;

        settxtstyle(COMPLEX_FONT,HORIZ_DIR,3);
        outtextxy(40,20,"Let\'s Begin.-");
        gotoxy(5,7);

```

```
cout<<"Name of first player: ";
gets(p1); e=strlen(p1);for(d=0;d<e;d++)p1[d]=toupper(p1[d]);
gotoxy(5,8);
cout<<"Name of second player: ";
gets(p2); e=strlen(p2);for(d=0;d<e;d++)p2[d]=toupper(p2[d]);
gotoxy(5,9);
cout<<"Number of words that each player\'d enter (max 40): ";
cin>>j;
```

```
    if((j<1) || (j>40))
    {
        clrscr();
        cout<<"\n\tSorry!! Wrong input. Try next time.";
        delay(2000);
        exit(0);
    }
```

```
    line(120,150,500,150);
```

```
    j*=2;
```

```
gd=DETECT,gm;
initgraph(&gd,&gm,"\\TURBOC3\\BGI");
setbkcolor(RED);
cout<<"\n\n\t";
```

```

cout<<p1<<"! Enter first word: ";
gets(word[0]);

x=strlen(word[0]);
for(i=1;i<j;i++)
{
    if(i%2==0)
    { clrscr();
      cout<<"\n\n\t";
      cout<<p1<<"! Enter next word starting with"
        <<" \"<<word[i-1][x-1]<<"', "
        <<"\n\t(within 30 seconds) : \t\t\t";
      gets(word[i]);

      if((word[i][0]!=word[i-1][x-1]) || (tell(i)--0))
      {
          do
          {
              if(word[i][0]=='*')
              {
                  cout<<"\n\t"
                    <<"_____ "
                    <<"_____";
                  cout<<"\n\t\t\ta";
                  cout<<p2
                    <<"! Your opponent has knelt in front"

```

```

        <<" of you! You Won!!!";
        goto MATCH;
    }
    else
    {
        cout<<"\n\tWord should start with \"
            <<word[i-1][x-1]<<"\' & it should"
            <<" not be repeated! \n\t";
        cout<<"Either enter \'*\'' if you have no";
        cout<<" words, or enter the word again. ";
        gets(word[i]);
    }

    if(word[i][0]==word[i-1][x-1])
        break;
    num++;
}while(num!=2);
}

if(num==2)
{
    cout<<"\n\t"
        <<"_____ "
        <<"_____ \n";
    cout<<"\t\tSorry! "
        <<"You\'ve crossed limit. You are lost!!!";
}

```

```

        cout<<"\n\t\ta";
        cout<<p2<<"! You won, "
            <<"as you are a living dictionary!!";
        goto MATCH;
    }
    else
        num=0;
}

else
{
    cout<<"\n\n\t";
    cout<<p2<<"! Enter next word starting with"
        <<" \"<<word[i-1][x-1]<<"\', "
        <<"\n\t(within 30 seconds) : \t\t\t";
    gets(word[i]);

    if((word[i][0]!=word[i-1][x-1]) || (tell(i)--0))
    {
        do
        {
            if(word[i][0]=='\n')
            {
                cout<<"\n\t"
                    <<"_____ "
                    <<"_____";
            }

```

```

cout<<"\n\t\t\ta";
cout<<p1<<"! Your opponent has knelt in front"
<<" of you! You Won!!!";
    goto MATCH;
}
else
{
    cout<<"\n\tWord should start with \"
        <<word[i-1][x-1]<<"\' & it should"
        <<" not be repeated! \n\t";
    cout<<"Either enter \'*\'' if you have no";
    cout<<" words, or enter the word again: ";
    gets(word[i]);
}

    if(word[i][0]==word[i-1][x-1])
        break;
    num++;
}while(num!=2);
}

if(num==2)
{
    cout<<"\n\t"
        <<"_____ "
        <<"_____ \n";
}

```

```

        cout<<"\t\tSorry! "
            <<"You\'ve crossed limit. You are lost!!";
        cout<<"\n\t\ta";
        cout<<p1<<"! You won, "
            <<"as you are a living dictionary!!";
        goto MATCH;
    }
    else
        num=0;
}

```

```

    x=strlen(word[i]);
}

```

**MATCH:**

```

clrscr();

```

```

gd=DETECT,gm;
initgraph(&gd,&gm,"\\TURBOC3\\BGI");
setbkcolor(RED);

```

```

setcolor(MAGENTA);
settextstyle(COMPLEX_FONT,HORIZ_DIR,3);

```



```

rectangle(40,20,600,100);
if(i==j)
{
    gotoxy(10,3);
    cout<<"How great players you are! ";
    outtextxy(100,60,"MATCH DRAW!!!");
}
else
{
    if(i%2==0)
    {
        gotoxy(10,3);
        cout<<"Winner is: ";
        outtextxy(100,60,p2);
        win_update(p2);
    }
    else
    {
        gotoxy(10,3);
        cout<<"Winner is: ";
        outtextxy(100,60,p1);
        win_update(p1);
    }
}
int copy=j;
j=i;

```

```
char choice;
```

```
gotoxy(13,10);
```

```
cout<<"• Enter any key to go back to Main Menu,";
```

```
gotoxy(15,11);
```

```
cout<<"\S\' for Summery or \O\' to get exit.";
```

```
gotoxy(15,12);
```

```
cout<<"Enter Your choice: ";
```

```
cin>>choice;
```

```
switch(choice)
```

```
{
```

```
case 'O': {
```

```
clrscr();
```

```
setbkcolor(RED);
```

```
cout<<"\n\tThanks for giving a look.";
```

```
delay(2000);
```

```
exit(0);
```

```
}
```

```
break;
```

```
case 's': summery(j,copy);
```

```
break;
```

```
case 'S': summery(j,copy);
```

```
break;
```

```
default : {
```

```
clrscr();
```

```

        Main.Menu();
    }
}

```

*/\* To resist the words from being repeated \*/*

```

int tell(int i)
{
    int x=1;

    for(int j=0;j<i;j++)
    {
        if(strcmpi(word[j],word[i])==0)
        {
            x=0;
            break;
        }
    }

    return x;
}

```

## /\* INTRODUCTION TO WORD-GAME & HOW TO PLAY \*/

```
void about()
{
    clrscr();
    char choice;

    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    setbkcolor(RED);
    setcolor(BLUE);

    settxtstyle(TRIPLEX_FONT,HORIZ_DIR,3);
    outtextxy(40,20,"WORD-GAME");

    rectangle(40,60,620,150);
    line(40,60,40,150);
    rectangle(40,60,620,150);
    gotoxy(12,5);
    cout<<"This game is for two players, that tests your "
    <<"vocabulary and ";
    gotoxy(10,6);
    cout<<"strengthens your command on the words of
English "
    <<"language.";
```

```

gotoxy(12,7);
    cout<<"It would also improve your grip on this language.";
gotoxy(12,8);
    cout<<"It has a user friendly interface, and trust "
        <<"you would really ";
gotoxy(10,9);
    cout<<"like this Game. It\'d be cool to call it- "
        <<"\\"ENGLISH-ANTAKSHRI\\"";

    settextstyle(TRIPLEX_FONT,HORIZ_DIR,3);
    outtextxy(40,160,"HOW TO PLAY");
    rectangle(40,200,620,420);
gotoxy(9,14);
    cout<<"1) Enter Names of the players and no. of words to
be "
        <<"entered.";
gotoxy(9,15);
    cout<<"2) Now, one player would enter the first word.";
gotoxy(9,16);
    cout<<"3) Then other\'d enter new word starting from
last "
        <<"word\'s last letter.";
gotoxy(9,17);
    cout<<"4) In this way the loop would continue until
players "
        <<"would not enter ";

```

```

gotoxy(12,18);
    cout<<"complete no. of words or anyone would not loose
the game";
    gotoxy(9,19);
    cout<<"5) Every player would get 3 chances to correct
his/her "
        <<"entry.";
    gotoxy(12,21);
    cout<<"So, what are you waiting for! Come-on get your
friend";
    gotoxy(12,22);
    cout<<"now and let\'s play it!!"<<endl;

gotoxy(11,24);
    cout<<"• Enter any key to go back to Main Menu or "
        <<"\0\' to get exit.";
    cout<<endl;
gotoxy(13,25);
    cout<<"Enter Your choice: ";
    cin>>choice;

    Main.Choice(choice);
}

```

**/\* ABOUT THE DEVELOPER \*/**

```

void credit()

```

```
{
clrscr();
    char choice;

    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    setbkcolor(RED);
    setcolor(BLUE);

    settextstyle(TRIPLEX_FONT,HORIZ_DIR,3);
    outtextxy(40,20,"About");

    rectangle(40,60,620,300);
    gotoxy(9,6);
        cout<<"This game is independently developed by \"Ravi
Prakash\".";
    gotoxy(9,8);
        cout<<"He is currently a student of B.Sc. (Hon.) Computer
Science";
    gotoxy(9,9);
        cout<<"in College of Vocational Studies (CVS) at ";
    gotoxy(9,10);
        cout<<"University of Delhi.";
    gotoxy(9,12);
        cout<<"This game is developed for submitting as a project
in C++";
```

```

gotoxy(10,15);
    cout<<"• Enter any key to go back to Main Menu or "
        <<"\0\' to get exit.";
gotoxy(14,16);
    cout<<"Enter Your choice: ";
    cin>>choice;

    Main.Choice(choice);
}

/* TO DISPLAY RECENT 5 WINNERS' NAME */

void winner()
{
    clrscr();

    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    setbkcolor(RED);
    setcolor(BLUE);

    settextstyle(TRIPLEX_FONT,HORIZ_DIR,3);
    outtextxy(120,20,"Recent Winners");

    char choice;
        char ch,winners[25];
        fstream win_data;

```



```

win_data.open("winner.txt",ios::in);
if(!win_data)
{ win_data.close();
  gotoxy(18,7);
  cout<<"File does not exist!!";
  textcolor(14);
  cout<<endl;
  if(choice!='0')
  {
    clrscr();
    Main.Menu();
  }
else
{
  clrscr();
  setbkcolor(RED);
  cout<<"\n\tThanks for giving a look.";
  delay(2000);
  exit(0);
}
}
else
{

rectangle(120,60,280,180);
int x=18,y=5;

```

```

        while(!win_data.eof())
        {
            win_data.getline(winners,25);
            win_data.get(ch);
            gotoxy(x,y);
            cout<<winners;
            y++;
        }
    }
    win_data.close();

```

```

cout<<endl<<endl<<endl<<endl<<endl;

```

```

gotoxy(13,13);

```

```

    cout<<"• Enter any key to go back to Main Menu or "
    <<"\0\" to get exit.";

```

```

gotoxy(15,14);

```

```

    cout<<"Enter Your choice: ";
    cin>>choice;

```

```

    Main.Choice(choice);

```

```

}

```

**/\* TO SUMMERISE THE GAME'S RESULT \*/**

```
void summery(int j, int copy)
{
    clrscr();

    int gd=DETECT,gm;
    initgraph(&gd,&gm,"\\TURBOC3\\BGI");
    setbkcolor(RED);

    cout<<"\n\n\t";
    setcolor(18);

    settextstyle(TRIPLEX_FONT,HORIZ_DIR,3);
    outtextxy(40,20,"Words entered respectively:-");
    cout<<"\n\n";
    for(int i=0;i<j;i++)
    {
        if(i%2==0)
        {
            cout<<"\tBy "<<p1<<" ";
            puts(word[i]);
        }
        else
        {
            cout<<"\tBy "<<p2<<" ";
```

```

        puts(word[i]);
        cout<<"\n";
    }
}
cout<<"\n\t";
setcolor(15);
cout<<"Result:-\n";
    if(i==copy)
    {
        cout<<"Match Draw!!";
        goto Place;
    }
    else
    cout<<"\n\t\t";
    cout<<"Winner is: ";
    {
        if(i%2==0)
            cout<<p2;
        else
            cout<<p1;
    }

```

**Place.**

```

cout<<"\n\n\t";
cout<<"• Enter any key to go back to Main Menu or "

```

```

        <<"\0\' to get exit.\n";
char choice;
cout<<"\t Enter Your choice: ";
cin>>choice;

```

```

    Main.Choice(choice);

```

```

}

```

**/•TO UPDATE WINNER'S FILE•/**

```

void win_update(char Winner[25])
{
    char ch,winners[25];
    int counter=1;
    fstream New("winner.txt",ios::noreplace);
    if(New)
    {
        New<<Winner<<"\n";
        New.close();
    }
    else
    {
        fstream backup("backup.txt",ios::out);
        backup<<Winner<<"\n\t";
        fstream old(" winner.txt",ios::in);
    }
}

```

```
while(!old.eof())
{
    old.get(winners,25);
    old.get(ch);
        { counter++;
            backup<<winners<<"\n";
        }
    if(counter==5)
        break;
}
old.close();
backup.close();
    remove("winner.txt");
    rename("backup.txt","winner.txt");

}
```

**/\* THE END \*/**

# OUTPUT

## 1. WELCOME SCREEN



## 2. ABOUT THE GAME



### 3. CREDIT

#### About

This game is independently developed by "Ravi Prakash".

He is currently a student of B.Sc. (Hon.) Computer Science in College of Vocational Studies (CVS) at University of Delhi.

This game is developed for submitting as a project in C++

\* Enter any key to go back to Main Menu or '0' to get exit.  
Enter Your choice:

### 4. GAME

#### Rules:-

- 1) Players must have to enter the word within a fixed time-limit i.e. 30 seconds.
- 2) One who leaves game first would be considered defeated.
- 3) Player can accept defeat by entering '\*' instead of the word.
- 4) All words must be in small letter.

---

Press any key to proceed.



Let's Begin:-

Name of first player: Ravi  
Name of second player: Lilly  
Number of words that each player'd enter (max 40): 3

How great players you are!

**MATCH DRAW!!!**

\* Enter any key to go back to Main Menu,  
'S' for Summery or '0' to get exit.  
Enter Your choice:

## 5. WINNERS

### Recent Winners

RAVI  
ROBERT  
JHON K.  
LOKESH  
CHARLET

\* Enter any key to go back to Main Menu or '0' to get exit.  
Enter Your choice:

---