AIM OF THE PROJECT

The project "K.B.C Quiz" is a simulation of the popular TV game show called "Kaun Banega Crorepati".

 The aim of the quiz is to let the user practice his quizzing skills using the game and has fun.

This project is written in C++ programming language.

The objective and scope of this project KBC Quiz System is to test the general knowledge of the user.

It has the following objectives:

Accuracy:

The KBC Quiz System provides the user a quick response with very accurate information regarding the questions or instructions.

User-Friendly:

The software KBC Quiz has a very user-friendly interface. Thus the users will feel very easy to work on it. The software provides accuracy along with a pleasant interface. It makes the present manual system more interactive, speedy and user friendly.

Availability:

There is no delay in the availability of any information, whatever needed, can be captured very quickly and easily.

INTRODUCTION

"K.B.C Quiz" is a game played to check the knowledge, accuracy, speed and quizzing skills of the user.

It also checks the General Awareness of the user regarding the major happenings in the country and the world.

Besides, the quiz tests the ability of the user to tackle and answer with alacrity, questions pertaining to different fields such as history, geography, economics, sports, media, books, current affairs, entertainment, music ,technology, politics, upcoming programmes etc.

The quiz has 14 levels to test the General Awareness of the user.

User can earn a minimum amount of Rs.5000 (Five thousand rupees) to maximum amount of Rs.50000000 (Five Crore Rupees) in these 14 levels.

Each subsequent level is higher in difficulty level than its preceding level.

The user will be given 4 options to each question, out of which one is the correct answer.

The user also has 3 lifelines fifty-fifty, expert advice and audience poll to help him get the correct answer in any level of the game.user can use any lifeline, but only once in his game.

Each correct answer will take the user to the next level.

In case, the user selects an incorrect answer, the game ends then and there.

HAEDER FILES INCLUDED

```
#include<fstream.h>
#include<conio.h>
#include<stdio.h>
#include<string.h>
#include<ctype.h>
#include<math.h>
#include<dos.h>
#include<stdlib.h>
#include<graphics.h>
```

DATA DICTIONARY

class KBC

➢ data members

- char que[200];

- char opt1[50];

- char opt2[50];

- char opt3[50];

- char opt4[50];

- char corr_ans;

➢ member functions

- void indata();

- void outdata();

- char ret_ans();

- void audience_poll(int);

- void fifty_fifty(int);

- void expert_advice(int);

- char* return_que()

Global variables used

➢ *KBC k;*

A global object of class KBC used to call the lifeline functions of the class KBC.

➢ *double money;*

A global variable used to store the amount of money won by the user in the quiz, corresponding to the level he is playing.

Local variables used

➢ *void main()*

- **int gd;**

    The graphic driver which is initialized with DETECT.

- **int gm;**

    The graphics mode.

- **int ch;**

    Used to store the choice of the user to play quiz, log into the admin or exit.

- **char pass[];**

    String where the user enters the password if he logs into the admin.

- **int opt;**

    Stores the choice of the user to write on file, modify a question or delete a question.

- **int midx;**

  x-coordinate of midpoint of screen.

- **int midy;**

  y-coordinate of midpoint of screen.

- **int i;**

  Used in loop to enter password character by character.

- **int j;**

  Used to match the user's password with the admin login's password. Initialized with 0

➢ *void write_on_file()*

- **char choice;**

  It stores the choise of the user as 'y' or 'n' to continue writing questions.

- **char file[10];**

  String which stores the filename that is to be opened to write the question.

- **char level_no[5];**

  String that stores the level number of the question to be entered.

- **KBC k1;**

  Object of class KBC used to access member function indata() to write the question.

➢ *KBC read_from_file(int, int)*

- **char file[10];**

  String which stores the filename that is to be opened to read the question.

- **long int pos;**

  used for the random movement in the binary file opened to read the particular question.

- **KBC k2;**

  Object that is returned from function storing the question read.

- **char temp[4];**

  Used to store the question level in character form in string, so that it can be read.

➢ *void modify_que()*

- **char level[5];**

  Takes the question level of the question to be modified.

- **char file[10];**

  stores the filename where the question is to be modified.

- **char choice;**

  It stores the choice of the user as 'y' or 'n' to continue modifying questions.

- **int l;**

  takes the question number of the question to be modified by the user.

- **long int pos;**

  Used for the random movement in the binary file opened to modify the particular question.

- **KBC k4;**

  Object of class KBC used to access member function indata() to write the modified question.

➢ *void delete_que()*

- **char file[10];**

  Stores the filename where the question is to be deleted.

- **char level[2];**

  Takes the question level of the question to be modified from the user.

- **int qno;**

  Takes the question number of the question to be modified from the user.

- **KBC a;**

  Used for reading from file and writing to another file.

➢ *void generate_nos(int [])*

- **int i;**

  Initialized with zero. Used to run the loop 14 times to store the question numbers for each level.

➢ *void KBC::audience_poll(int p)*

- **int p;**

  Used to check if the lifeline has been already used or not.

- **int gdriver = DETECT;**

  the graphdriver initialized with DETECT.

- **int gmode;**

  The graphmode.

- **int midx, midy;**

  stores the midpoint of the x-coordinate and y-coordinate on the screen.

➢ *void KBC::fifty_fifty(int f)*

- **int f;**

  Used to check if the lifeline has been already used or not.

➤ *void KBC::expert_advice(int ex)*

- **int ex;**

  Used to check if the lifeline has been already used or not.

➤ *void lifelines(int &f,int &ex, int&p)*

- These variables are passed by reference. They are used to check if the lifeline which takes them as parameter, has been already used or not by the user.

- **int opt1;**

  Takes user's choice of lifeline.

- **int opt;**

  Its values decide which lifeline function is to be called.

➤ *void update_money(int level)*

- **int level;**

  It stores the question level corresponding to which appropriate amount of money is allocated to the user.

➤ *void play_quiz()*

- **int nos[14];**

  array of integers where question numbers are stored for each level of the game.

- **int f=0,ex=0,p=0;**

  Variables to check if lifelines have been already used or not.
- **char player_ans;**

Takes the user's answer for a certain question.

- **char opt;**

Takes the user's choise to use a lifeline or not for a certain question.

- **int i;**

Used to run the loop for each level.

➢ *void kbc_logo()*

- **int n;**

used to run the loop to draw a circle.

- **char l=176,d=178;**

used to give particular values on the screen.

INTRODUCTION TO MODULES

➢ void main()

void main() is the function from where execution of the quiz takes place. It displays the name of the game and provides the user, the option to either play the game, log in to the admin to alter the questions set up in the quiz or exit the game. On the basis of the option chosen by the user, the next operation is performed.

➢ class KBC

A class of the program whose object stores the question, its 4 options along with the correct answer. It also contains functions regarding input, output and lifelines used in the program.

➢ void indata()

A member function of class 'KBC'. It allows the user to enter the question, its 4 options along with the correct answer. Being a public member of the class, it can be accessed outside the class using a class object.

➢ void outdata()

A member function of class 'KBC'. It displays the question, its 4 options along with the correct answer of the object which calls outdata().This is also a public member function of the class, thus can be accessed outside the class using an object of the class.

➢ char ret_ans()

Since the value of the correct answer for a question is stored in a private data member 'corr_ans', it cannot be accessed outside the class. Therefore to use the correct answer for a question, especially to check and match with the user's answer, ret_asns() member function is used. It returns a character i.e. the corr_ans of the object used in calling it.

➢ char *ret_que()

Since question is a private data member, it cannot be accessed outside the class.so, function ret_que() is used. It doesn't take ant parameter but returns a string pointer.

➢ void lifelines(int &,int &,int &)

Lifelines(int &,int &,int &) is a global function of the program. It allows the user to choose the lifeline he wants for a particular question in the game. The 3 lifelines provided to the user are fifty-fifty, expert advice, audience poll. 3 values are passed as arguments to the function. These arguments are used to check whether a particular lifeline has been used by the user or not as according to the rules of the program, a lifeline can be used only once in a game.

➢ void KBC::fifty_fifty(int)

A member function of class 'KBC'. Fifty_fifty() is called when the user wants to use the lifeline named Fifty-fifty. This lifeline removes any 2 incorrect answers from the 4 options provided to the user. Now the user has to select any one option from the remaining 2 options. Fifty_fifty() also checks if the user has already used this lifeline or not, by checking the value of the parameter paseed as an argument to the function. If user has used fifty_fifty earlier in the game, the lifeline would not be used again. Being a member function of class, it is called using an object of the class.

➢ void KBC::expert_advice(int)

A member function of class 'KBC'. Expert_advice() is called when the user wants to take help from an expert regarding a question in any level. Since the game is computer based, here the expert is the computer itself. It hints the user regarding the correct answer to the question asked. Then the user decides whether to agree or disagree with the expert and answers the question. This lifeline is also used once in the game. This is checked by the value that is passed as an argument to the function. Being a member function of class, it is called using an object of the class.

➢ void KBC::audience_poll(int)

A member function of class 'KBC'. audience_poll() is called when the user wants to get the opinion of the audience regarding a particular question in the game. This is exactly like the lifeline used in the TV show where audience give their response to a question. Audience poll will provide the views of the audience, to the user by means of a graph. Each option will have values in the graph corresponding to the number of people voting for that certain option. The user then decides whether to agree or disagree with the audience and answers the question. This lifeline is also used once in the game. This is checked by the value that is passed as an argument to the function. Being a member function of class, it is called using an object of the class.

➢ void write_on_file()

Write_on_file() is a global function of the progarm. When the user logs into the admin, among various options, one is write_on_file(). This function allows the user to write a question in binary format onto a file. The user has to specify the question level of the question written. This function opens the file corresponding to the entered question level and writes the question, its 4 options and the correct answer.

➢ KBC read_from_file(int,int)

read_from_file(int,int) is a global function of the progarm. This function reads a particular question, its 4 options and its correct answer as a whole from a file. It takes 2 parameters as arguments to a function - the question level and the question number in that particular level of the question. From these 2 values, a file is opened in binary mode and the object is read from the file. It returns the object it has read from file.

➢ void modify_que()

modify_que() is a global function of the progarm. When the user logs into the admin, among various options, one is modify_que(). This function allows the user to modify a certain question in a certain level. The user enters the question level and the question number of the question to be modified. The desired file opens in binary mode and the user enters the modified details.

➢ void delete_que()

delete_que() is a global function of the progarm. When the user logs into the admin, among various options, one is delete_que().It allows the user to delete a certain question in a certain level. The user enters the question level and the question number of the question to be deleted. The desired file opens in binary mode and the user then deletes it from file.

➢ void generate_nos(int [])

Generate_nos() is a global function of the program. It takes an array of integers as parameter and uses random() function to store values from 0 to 13 in elements of the array. This array actually stores the question number to be selected from each question level file that'll be displayed on screen when the user reaches a certain level.

➢ void update_money(int)

update_money(int) is a global function of the program. It takes one parameter that is the question level that the user has crossed, corresponding to which amount of money is allocated to him.

➢ void game_over()

game_over() is a global function of the program. This function is called when the game ends i.e. the user selects an incorrect response for a question. The function displays a message along with the amount of money the user has won.
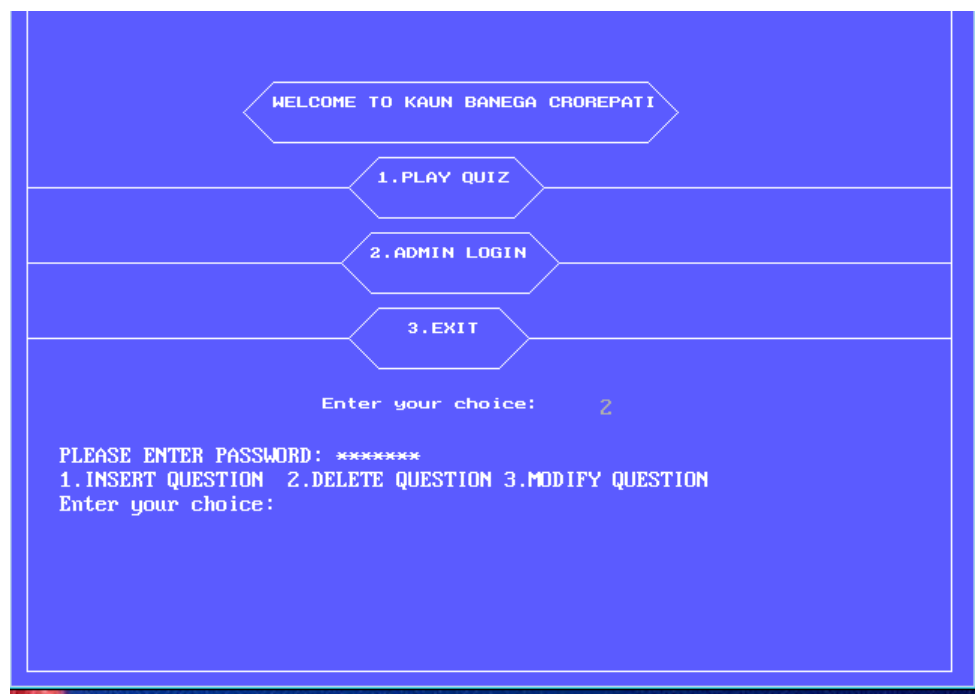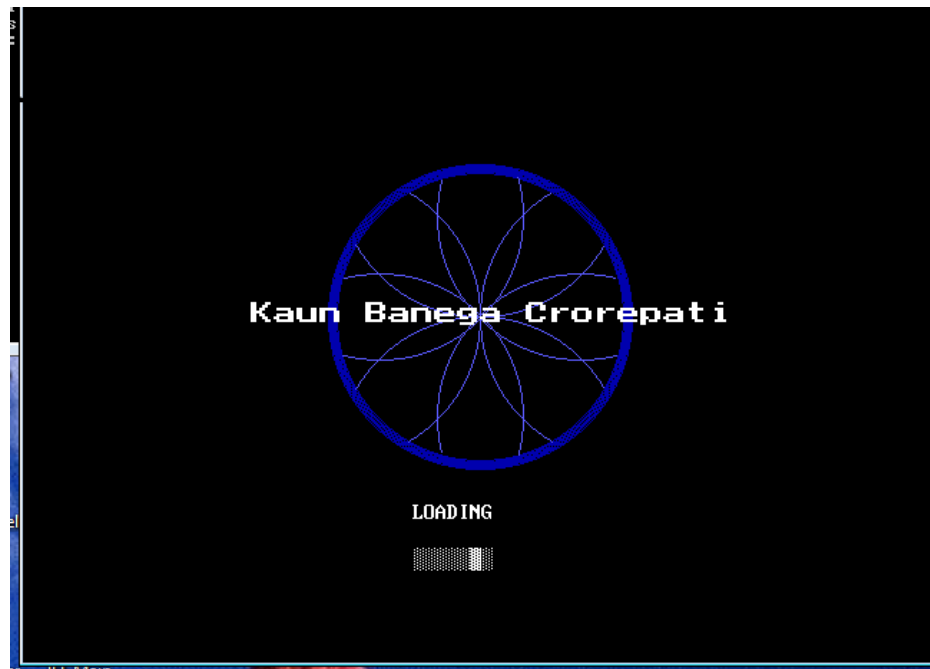
➢ void play_quiz()

play_quiz() is a global function of the program. It starts the quiz and calls the various functions required. It checks the use of lifelines by the user. It also checks whether the user's answer matches with the correct response or not.

➢ void kbc_logo()

Uses functions present in graphics.h to draw the logo of the game.

SAMPLE OUTPUT

Kaun Banega Crorepati

LOADING

WELCOME TO KAUN BANEGA CROREPATI

1.PLAY QUIZ

2.ADMIN LOGIN

3.EXIT

Enter your choice: 2

PLEASE ENTER PASSWORD: *******
1.INSERT QUESTION 2.DELETE QUESTION 3.MODIFY QUESTION
Enter your choice:

YOUR QUESTION IS.....

Which is the largest banana producing country in the world?

THE OPTIONS ARE....

A. Brazil

B. India

C. Mexico

D. China

Want to use lifelines(Y/N): y

Lifelines:
1.Fifty-Fifty
2.Expert Advice
3.Audience Poll
Enter your choice:

```
YOUR QUESTION IS.....

Who is the CEO of Facebook?

THE OPTIONS ARE....

A.  Bill Gates

B.  Mark Zuckerberg

C.  Satya Nadella

D.  Alfred Salim


 Want to use lifelines(Y/N):  y

 Lifelines:
 1.Fifty-Fifty
 2.Expert Advice
 3.Audience Poll
 Enter your choice:  2

 Expert says the correct option is:  B

 Want to use another lifeline?
```

```
Who is the poet of the poem 'Where the mind is without fear'?

THE OPTIONS ARE....

A.  Muhammad Iqbal

B.  Bankim Chandra Chatterjee

C.  Rabindranath Tagore

D.  Sri Aurobindo


 Want to use lifelines(Y/N):  y

 Lifelines:
 1.50-50
 2.Audience Poll
 Enter your choice:  1

 USING 50:50 LIFELINE
 The Options Are:
 A. Muhammad Iqbal
 C. Rabindranath Tagore

 Want to use another lifeline?
```

```
YOUR QUESTION IS.....

  In which city was Vasco Da Gama first burried?

THE OPTIONS ARE....

  A. Calicut

  B. Diu

  C. Bombay

  D. Cochin


  YOU DO NOT HAVE ANY LIFELINE!

  Enter your answer:
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```
Want to use another lifeline?        n


Enter your answer:   a


The correct answer was:       B

GAME OVER!!!
You win Rs. 0
THANK YOU FOR PLAYING!
```