

Internship-Project Report on

RETRO GAMES

Submitted in fulfillment of APSIT Skills Internship-Project of Semester-III

In

Information Technology

BY

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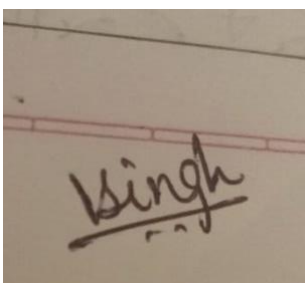


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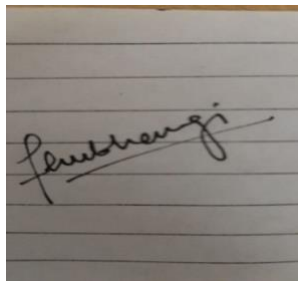
Declaration

We declare that this written submission represents our ideas in our own words and Where others' ideas or words have been included, we have adequately cited and Referenced the original sources .We also declare that we have adhered to all principles Of academic with honesty and integrity and have not misrepresented or fabricated or Falsified any idea/fact/source in our submission .We understand that any violation of The above will be cause for disciplinary action by the Institute and can also evoke penal Action from the sources which have thus not been properly cited or from whom proper Permission has not been taken when needed.

Mr. Vatsal Singh

A photograph of a handwritten signature 'Vatsal Singh' in black ink on a piece of lined paper. The signature is written in a cursive style, with 'Vatsal' and 'Singh' clearly legible.

Ms. Shubhangi Tripathi

A photograph of a handwritten signature 'Shubhangi Tripathi' in black ink on a piece of lined paper. The signature is written in a cursive style, with 'Shubhangi' and 'Tripathi' clearly legible.

Mr. Pushkar Telavane

A photograph of a handwritten signature 'Pushkar Telavane' in black ink on a piece of lined paper. The signature is written in a cursive style, with 'Pushkar' and 'Telavane' clearly legible.

ABSTRACT:

The idea of this project is to build gaming (programs) which we used to play in our childhood. To offer user to make a choice from set of mentioned games (through SWITCH CASE). These games are developed on C language on Dev C++ tool. This project is to bring those joyful days and childhood memories back to us. Pro-social games can increase empathy, co-operation, helping and emotional awareness.

INTRODUCTION:

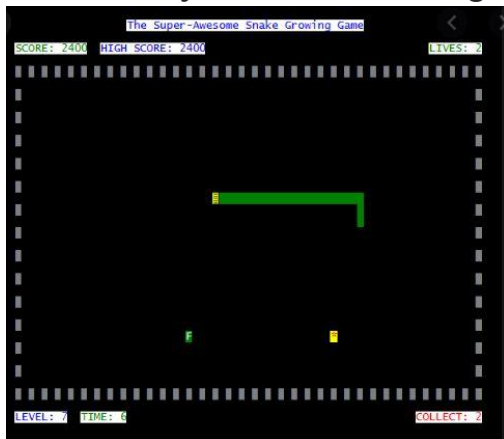
The basic code of our project is in C. The games available in our project are

- a. **TIC TAC TOE**- *it's a game for maximum of 2 players, X and O, who take turns marking the spaces in a 3×3 grid. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row is the winner.*

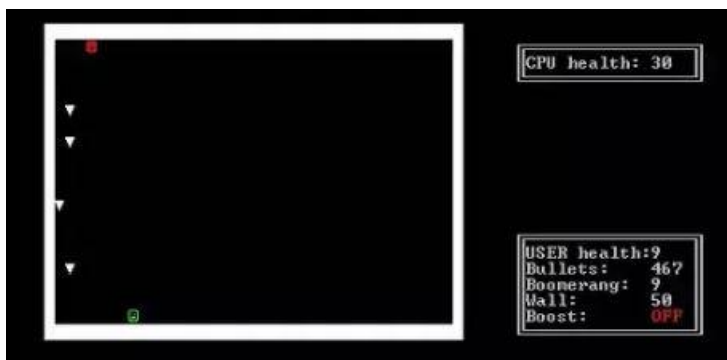
The following example game is won by the first player, X:



- b. **Snake Game**- *Foods are provided at the several co-ordinates of the screen for the snake to eat. Every time the snake eats the food, its length will be increased by one element along with the score.*



- c. **ASCII SHOWDOWN**- *basically a shooting game. The screen flashes whenever it hits the user or the CPU.*



These are the retro games which were a great part of our early gaming stages.

Addition to this many header files have been included in the codes some are listed below:-

- ***#include <conio.h>*** - is a C header file used mostly by MS-DOS compilers to provide console input/output.
- ***#include <windows.h>*** - contains declarations for all of the functions in the Windows API, all the common macros used by Windows programmers, and all the data types used by the various functions and subsystems.
- ***#include <time.h>*** - is a header file defined in the C Standard Library that contains time and date function declarations to provide standardized access to time/date manipulation and formatting.
- ***#include <process.h>*** - header file which contains function declarations and macros used in working with threads and processes.
- ***#include <stdlib.h>*** - header of the general purpose standard library of C programming language which includes functions involving memory allocation, process control, conversions and others.

System Architecture/Working:

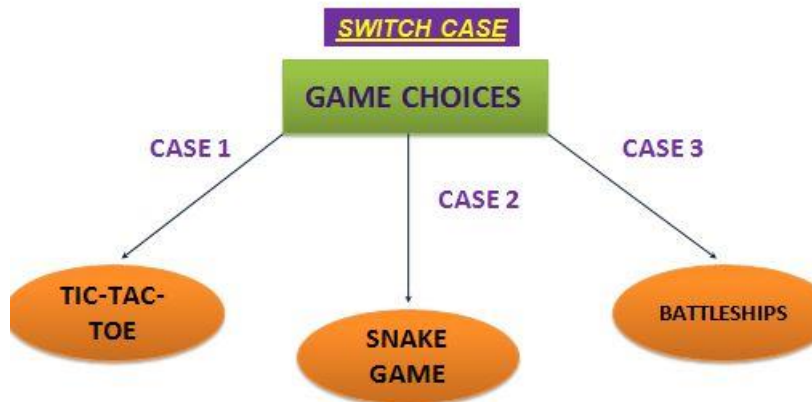


Fig- Basic layout of program

1. TIC-TAC-TOE- In the game the moves taken by the human and computer are chosen randomly. Total game works on looping conditions such as for, if and if-else. It uses the matrix format. It also contains an array of 9 members. Most part of the program works on if-else condition. Static variables are used in program and goto statements as well.

2. Snake game-A lot of variables are used in program. The stdlib.h with different functions used in the program. Goto statements and other looping condition are used. It has function declaration and delay along with for loops and while loop

3. ASCII Showdown- For this game's code we have used time header files. For the boundaries we have used 4 grids. Function declaration and function calling delay is also used along with for loops and while loops

PROBLEM DEFINITION:

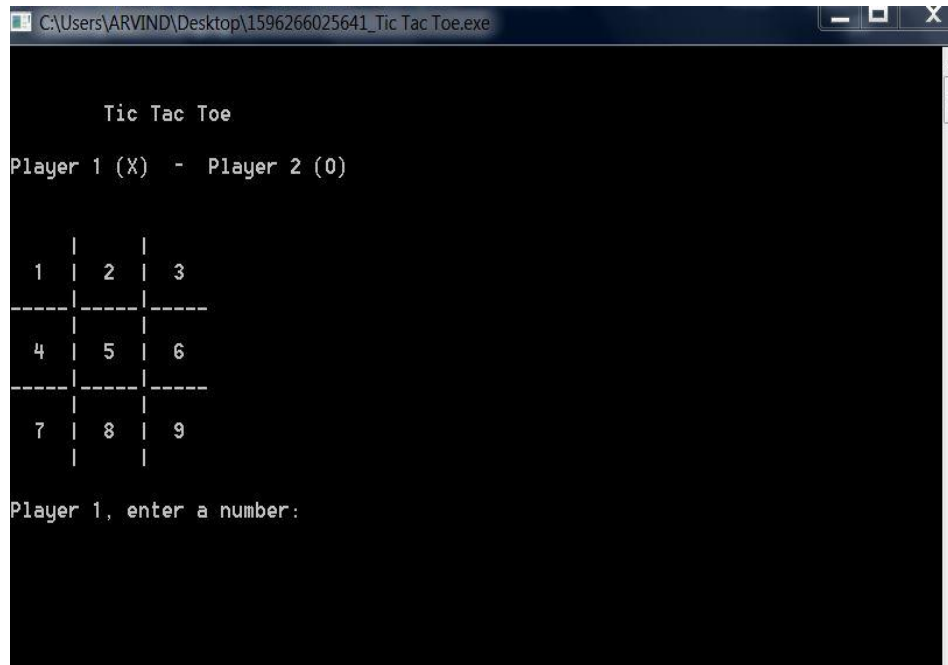
To create source code of the retro games which were a great part of our childhood and early gaming stages individually for user to play. The users can play these games and will be able to store their individual scores.

OBJECTIVE:

Objective of our program is to bring back retro games through coding in C. Playing RETRO games fulfills a purpose in their lives. This could include gaming for: relaxation, opportunities to exert control, enjoyment, creativity, socialization, prevent boredom, challenge, and achievement. It could also be used as a coping method or stress management. .The program is constructed keeping in mind that it should be user friendly as well as easy for any programmer to read and evaluate

IMPLEMENTATION:

1. TIC-TAC-TOE-



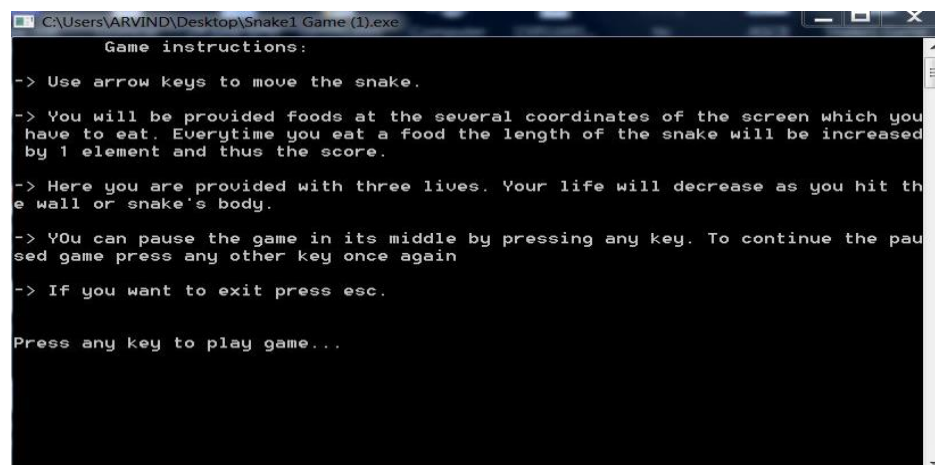
```
Tic Tac Toe
Player 1 (X) - Player 2 (O)

 1 | 2 | 3
---|---|---
 4 | 5 | 6
---|---|---
 7 | 8 | 9

Player 1, enter a number:
```

Fig- OUTPUT OF TIC-TAC-TOE

2. SNAKE GAME-



```
Game instructions:
-> Use arrow keys to move the snake.
-> You will be provided foods at the several coordinates of the screen which you
    have to eat. Everytime you eat a food the length of the snake will be increased
    by 1 element and thus the score.
-> Here you are provided with three lives. Your life will decrease as you hit th
    e wall or snake's body.
-> You can pause the game in its middle by pressing any key. To continue the pau
    sed game press any other key once again
-> If you want to exit press esc.

Press any key to play game...
```

Fig- OUTPUT OF SNAKE GAME

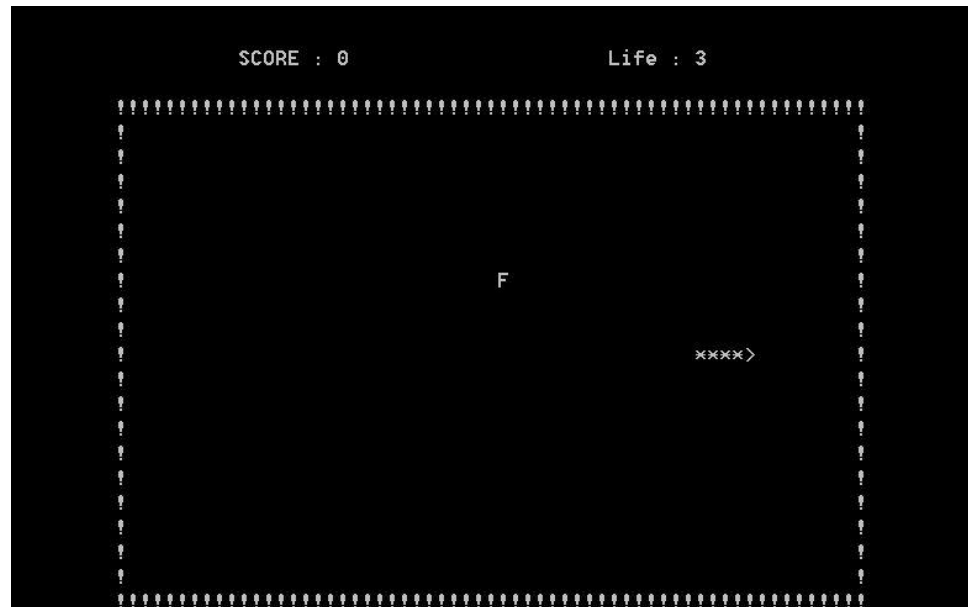
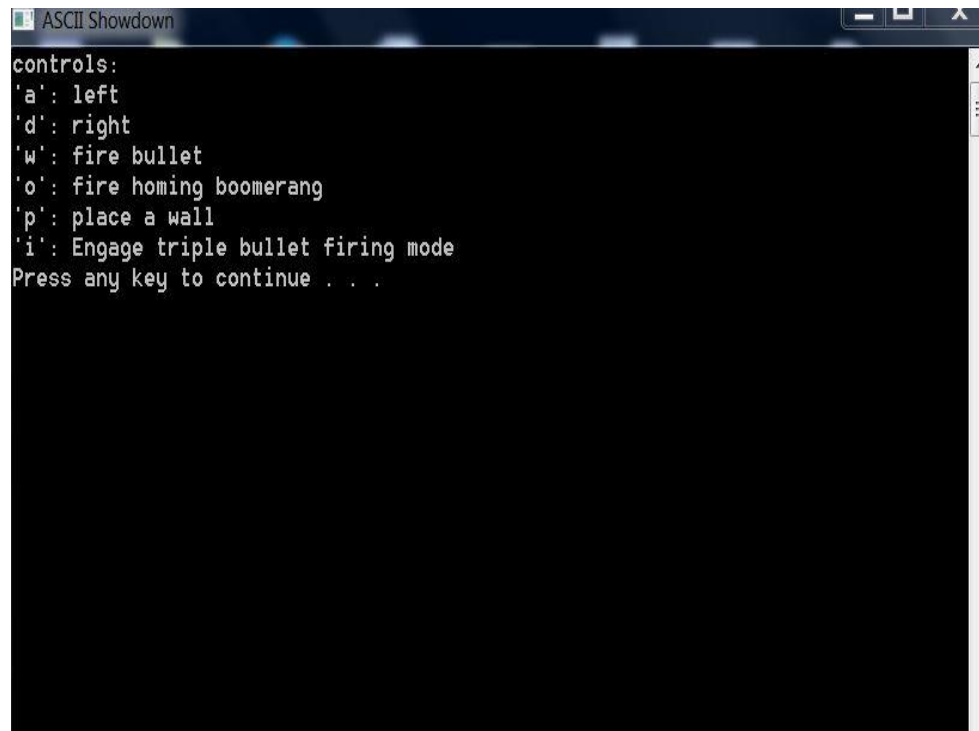


Fig- OUTPUT OF SNAKE GAME

3. ASCII SHOWDOWN-



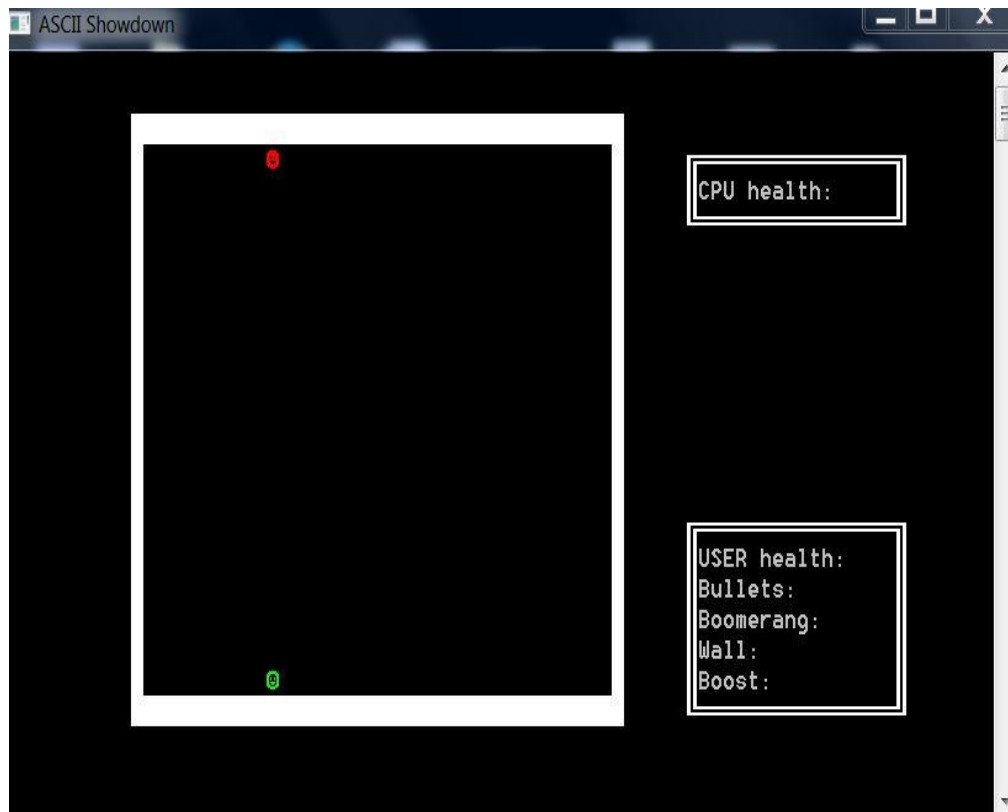


Fig- OUTPUT OF ASCII SHOWDOWN

CONCLUSIONS:

When games are played in moderation and with mindfulness, they are a viable source of stress relief as well as a catalyst for mental health improvement and development of social skills. We are successfully able to run the codes of all games in C.

REFERENCES:

- [https://www.quora.com/What-are-source-code-for-some-c++-basic-games-without-graphics.](https://www.quora.com/What-are-source-code-for-some-c++-basic-games-without-graphics)
- <https://www.codewithc.com/mini-project-in-c-snake-game/>

CERTIFICATES:

1. Mr. Vatsal Singh-

- * Introduction to Structured Query Language(SQL)*
- * C for everyone structured programming*
- * HTML, CSS, and JavaScript for Web Developers*
- * Leading Teams*
- * Fundamentals of Project Planning and Mangement*
- * Google Analytics for beginners and Advanced Google Analytics*
- * New Model of Business In Society*

2. Ms. Shubhangi Tripathi-

- * C for everyone structured programming*
- * HTML, CSS, and JavaScript for Web Developers*
- * Introduction to Structured Query Language(SQL)*
- * Wireless and Communication for everybody*
- * Introduction to Financial Markets*
- * Introduction to Personal Branding*
- * Leading Teams*
- * Disha portal*

3. Mr. Pushkar Telavane-

- * Introduction to Structured Query Language(SQL)*
- * C for everyone structured programming*
- * Wireless and Communication for everybody*
- * Leading Teams*
- * Green Strategy development*
- * Introduction to Financial Markets*

**** Fundamentals to Project Management***

**** HTML/CSS***