

# USER MANUAL FOR CHAIN REACTION

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## Introduction:

One of the most popular ways of recreation in today's digital world is computer games. It's one of those things given to us by the computer, which is praised and enjoyed by billions around the globe. With these thoughts in our mind we decided to use our newly acquired programming knowledge to create the famous computer game "Chain Reaction"- a game which has about 89, 10,000 results (0.31 seconds) on the google website and is a regular feature of Google play store .

## Specifications:

- Compiler which includes sdl library.
- Computer with open source C++ compiler.
- Requires 20MB of disk space.
- A decent processor to support( intel core i3 or higher is suggested)
- The game works completely on Windows OS.

## About the game:

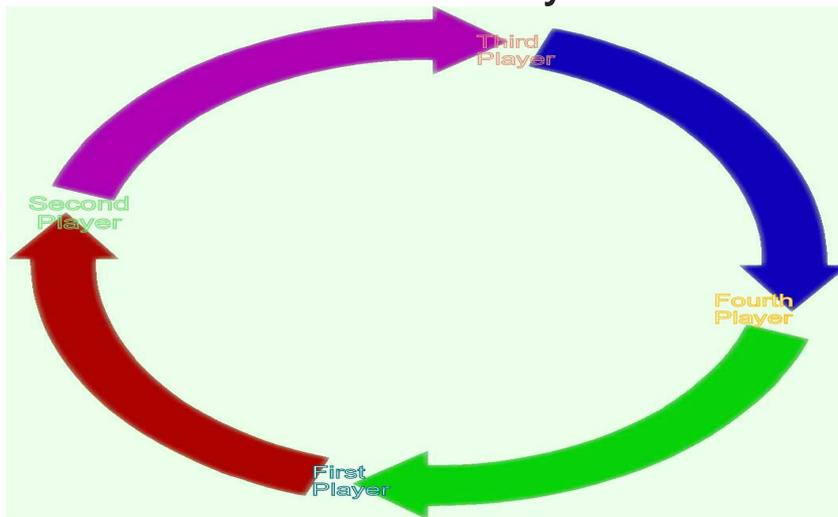
It's a multiplayer game with an option of including 2-4 players. It includes an option to choose between keyboard or mouse inputs. It includes an option of 1 lifeline which the user can use anytime to blast if the

box in the grid is empty .This lifeline can be used only in the keyboard input type within the game.It also allows the user to choose the type of grid such as (5x5,8x8,10x10).The player is needed to remove all other opponents' atoms from the board during the game. If in a multiplayer domain suppose a player X's all the atoms has been wiped out then he/she is out of the game before the game is over.

## How to use:

Whenever the user opens the game a screen pops up asking about the no. of players wherein the user can select the no. of players between 2 to 4.After this the user has to select between keyboard or mouse inputs. After that another window pops asking the user to choose the successive grid among the options (5x5,8x8,10x10).After this the player is taken to a window where the real gaming has to take place . Firstly the first user has to take the first move followed by the second player and it goes on and on till the last player takes his turn.

Now this cycle is repeated



upto if a player's all the atoms are wiped out the player is out of the game before the game has ended.

There are certain critical mass of atom after which the atom will explode for the atom which is in the corner it's critical mass is 2 atoms. For atoms at the extremities apart from the corners the critical mass is 3 atoms and for all the remaining atoms the critical mass is 4 atoms. The winner is decided whenever all the atoms visible in the grid are of one player. The most brilliant thing about the game which separates it from the rest of its competitors that there is an option of 1 lifeline in keyboard input type which provides the user with the option of bursting at any place. The lifeline is provided that can be utilised by pressing the Z key. The lifeline can be used only after number of moves done is greater than the total number of players in the game. When the cell explode it claims the nearby 4

cells which means that they are now part of the player's which were claimed by it.

And arrow keys are used in keyboard interface and mouse clicks are used in mouse interface. In keyboard interface if 'a' key is pressed a move is recorded if it's a valid move it is made visible on the screen. Player can only place an atom at a box which is either empty or has atom(s) of his colour.

Now within the keyboard interface:

If the user wants to use move downward then the player has to press .

If the user wants to use move sideways then the player has to press .

If the user wants to use move upward then the player has to press .

If the user wants to use move left sideways then the player has to press .

The player whose atom(s) remains alive the last is the winner.

Some screenshots of the game in action

