SYMBIOSIS INSTITUTE OF TECHNOLOGY (SIT)
Constituent of Symbiosis International (Deemed University), Pune
(Established under Section 3 of the UGC Act of 1956 vide notification number F-9-12/2001-U-3 of the Government of india)
Re-Accredited by NAAC with 'A' Grade
॥वसुधैव कुटुम्बकम्॥

C PROGRAMING PROJECT
ON
TIC -TAC -TOE

SOFTWARE REQUIREMENT SPECIFICATION(SRS)

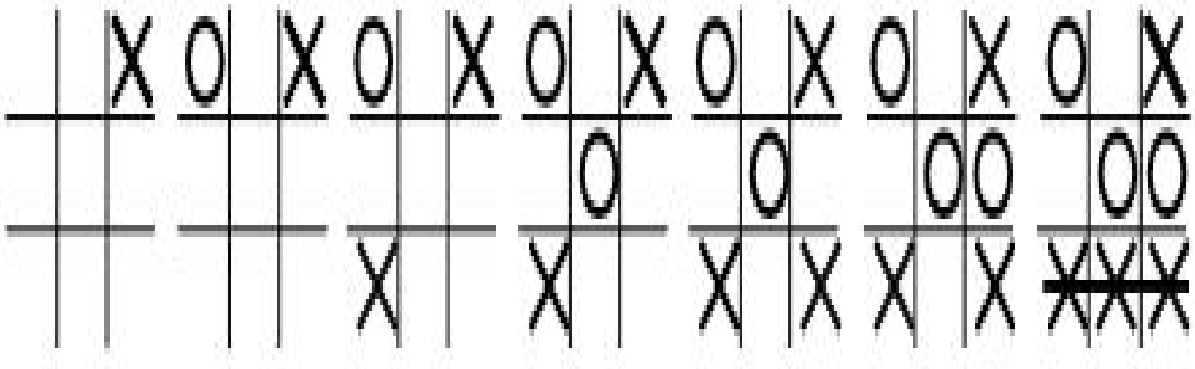
BY-
1)Hridyesh singh bisht(18070124030)
2)Kavya suthar(18070124037)
3)Parth sharma(18070124047)
4)Ishaan sharma(18070124032)

1.Introduction

1.1)This project is based on the game that was first played during first century bc in roman empire.This project makes use of the simple concepts of c language , to create an efficient tic-tac-toe game.

2.Theory of the game

This project is a very basic and non-graphic implementation of the old school game of Tic-Tac-Toe in C. Where a person would successfully win if he/she is successful in placing his/her shape(X/O) in a specific row, column or diagonal of a 3x3 grid.
A sample game is depicted below:



3. Operating Environment

Windows and MacOS both operating systems have been used for programming and testing using CodeBlocks IDE.

4.Overview

This SRS report is the final product of requirement gathering. It is a formal document that can be later used by the user and the programmer both to verify whether or not all the requirements and functionalities are present in the project. The SRS aims to answer all the basic questions about the software, such as operating environment, functional requirements, user characteristics, etc.

5.Project requirement

5.1)software requirement -c compiler ,ide.
5.2)hardware requirement- a working laptop or a computer.

5.3)skills required-

2.3.1)basic knowledge of c.

2.3.2)knowledge of functions, arrays , strings,pointers .

6.Modules

6.1)conditions()-This function checks on the three conditions that is row wise ,column wise and diagonal wise.

6.2)result ()- whichever user wins the game ,his name gets printed out.

7.Functions

7.1)starting question->

Select the option between player versus player or player versus the computer (the moves of the computer will be given by the function randomize .

7.2)input names and assigning characters ->

Take in their name as input in the form of a string .assign each name either a character cross or zero.

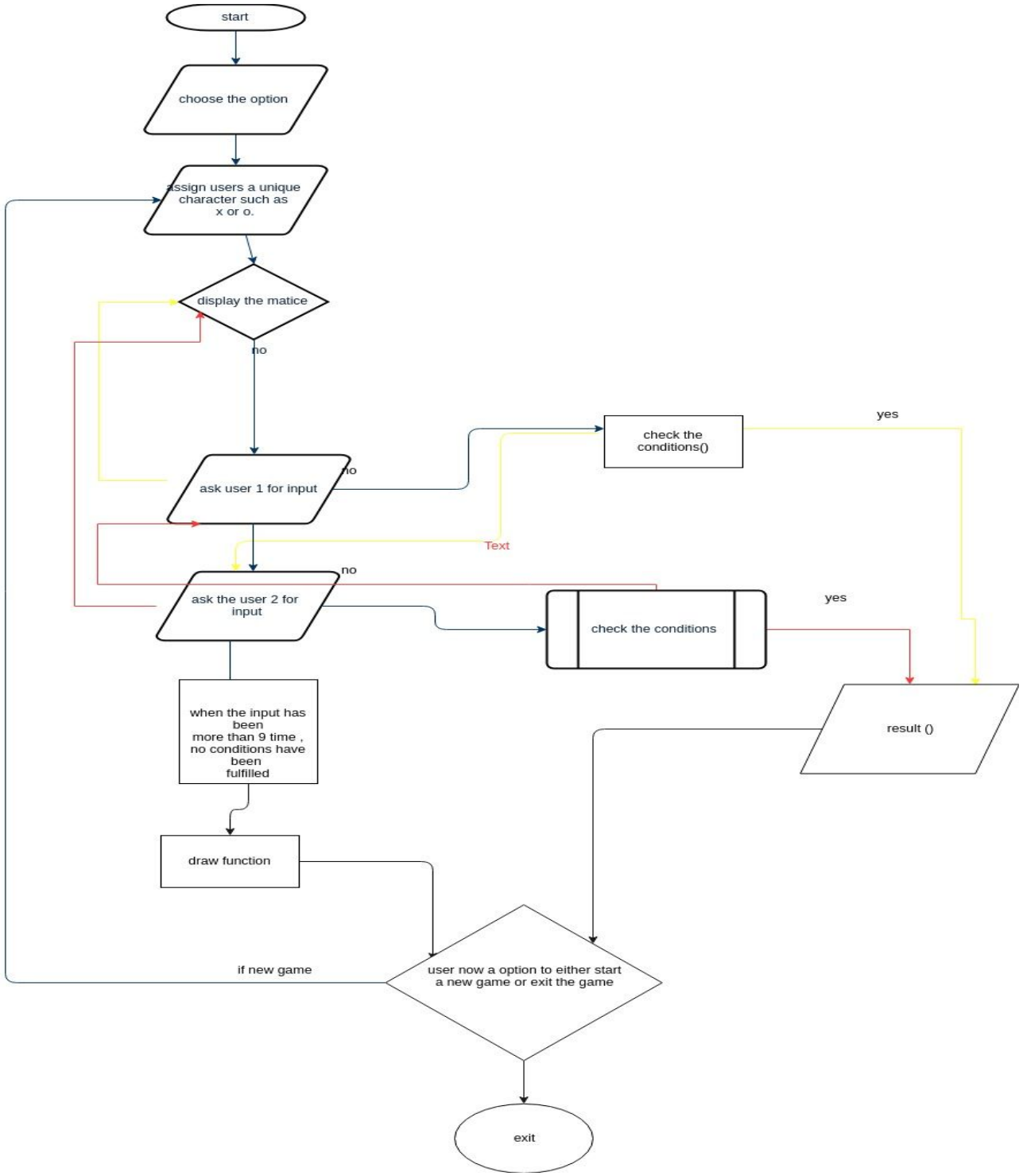
7.3)display of 3x3 size matrice ,with number written ascending order for each value in the array .

7.4)ask user 1 for an entry in the matric ,user will press the number he wants to input a x or an o .after the input ,we will show the user his turn in the matrice by replacing the number by the character user chose .

7.5)We will check 3 conditions which are row wise ,column wise and diagonal wise ,if no condition is true then we will let user 2 input ,if the condition is true then the result function will display the result.

7.6)after user 2 has entered his input, we will again show the user his turn in the matrice by replacing the number he pressed ,by a character .then we check the condition function which will check the 3 conditions ,if it is true then result function will display the result .

7.7)if the by the end of size of the matic ,none of the conditions have been satisfied the function draw is called .
7.8) the current game ends ,the user can initiate a new game .


start
choose the option
assign users a unique character such as x or o.
display the matice
no
ask user 1 for input
no
check the conditions()
yes
Text
ask the user 2 for input
no
check the conditions
yes
when the input has been more than 9 time , no conditions have been fulfilled
result ()
draw function
if new game
user now a option to either start a new game or exit the game
exit