# Report

### Flow chart



# Description

This application is a simple noughts and crosses game. The game is initialized in the console, where the user may start a new game, reset the matrix used to contain the game, or exit the local game therefore launching a server game.

The local game enables the user to play against an opponent through the console. It starts by displaying a start message, the student name and id, followed by the matrix key. The first player is asked to enter one of the cases displayed on the matrix key. If he enters a correct value, his representing symbol ("1" or "0") is placed on the matrix key that he chose. Then, a method checks if he won, and if not, the turn goes to the other player (see image 1). The game continues until a winner is found.

The server game is the same noughts and crosses game but presented as a web application. It uses forms instead of inputs (see image 2) which is more flexible since it get rids of the restraining loops that are present in the local game. It uses the same method "checkwinner" to search for a winner, except here, player one actually has crosses ("X"), and player two has noughts ("O"). This web application has a fancy layout, and keeps track of the wins by player, the number of games played, and the numbers of draws. All of these are displayed on the home page (see image 3).

### How to run application

The application is ran by searching for the file in the cmd console. Once in the right directory, the command "ruby file.rb" starts the local game. Exiting the local game starts the web-based version. Simply open a browser and access the link 'http://localhost:4567' to go to the home page of the application

# Appendix

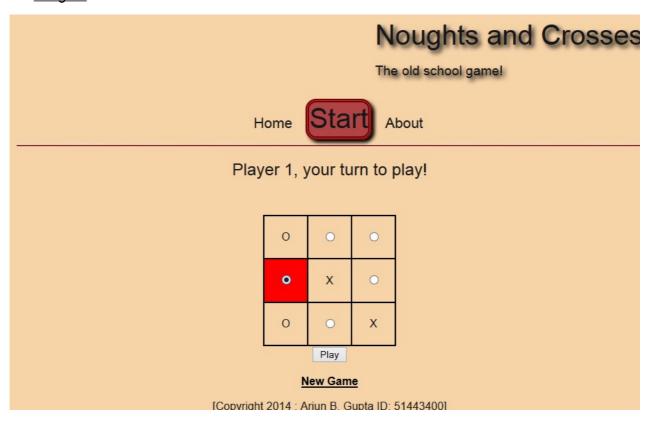
### Image 1

```
Invite de commandes - ruby wad_oxs_00_gen_09.rb

C:\Arjun\WAD>ruby wad_oxs_09_gen_09.rb

Welcome to Noughts and Crosses!
Created by:Arjun B. Gupta
Starting game...
Player 1: 0 and Player 2: 1
Table key:
11:23
14:516
17:819
18:11
18:11
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```

# Image 2



# Image 3

# Noughts and Crosses The old school game! Home Start About Press Start to start a game! Number of games played: 0 Number of games won by player 1: 0 Number of games won by player 2: 0 Numbers of draws: 0 [Copyright 2014: Arjun B. Gupta ID: 51443400]

# Image 4

