# Assignment 1 Tic Tac Toe Game

### **Team Members:**

Peter Wagdy 6727

Ahmed Alaa Eldin Tawfik 6842

# **Code Description:**

The Code is Designed using **State design pattern** and **Open Close Principle** includes **4 game modes** which are :

- User starts the game
- Computer starts the game
- User Vs Another User
- Computer Vs Computer

#### The Code is divided into 7 classes which are:

- Main class
- Context class
- State class

## **Concrete Classes:**

- UserStarts
- ComputerStarts
- ComputerVsComputer
- PlayerVsPlayer

**State Abstract Class** contain most of the game logic

And each of the classes **inherit** it contain an **abstract method start()** which describe how the game goes.