Final Project - General Al Design

Group name: Tic Tac Toe Tac Tic

Group members: Christina Yu, Ian Herdt, Lawrence Li, Steven Iovine **Project chosen**: Predicting human behavior in the game of Tic Tac Toe

Goals

- What might be the goals of the intelligent system?
 - o Better understand human behaviors in the context of Tic Tac Toe
 - Predict future moves based on previous user decisions and strategies
 - This is where "human behavior" comes into play, as our AI will learn and grow based on how people interact with it. It'll learn how people behave and adapt the human behavior for further prediction.
 - Compete in interactive games of Tic Tac Toe against the use

Environment

- What is the environment that the intelligent system will be adapting within?
 - Digital, virtual environment [Python Keras Tensorflow numpy library]
 - We will create a virtual game board to host games of Tic Tac Toe using numpy
 - Local; on a computer: user vs computer game session

Adaptation

- How might the intelligent system adapt to the environment given the goals?
 - Output prediction results based on the user action
 - Adapt to different user interactions to change computer predictions and strategies
- How might it's inner environment change?
 - Repeatedly update predictions based on user behavior (moves, time taken between each move, etc.)