

# PROJECT 1

## HOW TO RUN CODE

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There are totally 7 file in this project folder written in C++ as listed:

- **main.cpp:** Main file to compile project.
- **Board.cpp:** define function for class board, contain all the function belong to board and input card.
- **Player.cpp:** define function for class Player, contain all the function that decide how to turn to the next move and which cell it go for including both user and AI.
- **Games.cpp:** define function for class Game, contain all the functions for playing in games and make decision for the winner.
- **Node.cpp:** define function for class Node, assign the Alpha-Beta Pruning search technique based Minimax Algorithm.
- **Header.h:** define all header file of 4 classes, store all the methods of 4 class.
- **makefile:** It is basically used to create .cpp file and .h file for each class/functions and its functionalities and later link them all through a Makefile command available in C++.

### How to run code:

In this project, we have used **Visual Studio** for programming, so we can go ahead to compile the project by running *main.cpp*.

For run project by command line, I use makefile to do that.

1. Make sure your current directory is the project folder.
2. Because I use `mingw-w32` c++ compiler, so I used “`mingw32-make`” to build

When it successfully builds we need to input who (Human or AI) will play first and then the board size area.

- We may type (0/1) 1: User !! Else AI go!
- Choosing the board size by input 4 or 6.

*P/S: If you do have any problem with my report, don't hesitate to contact me via **hungle0804@gmail.com***