Introduction of the File Organization

1. main.cpp (.h)

Contains only the main() function.

1. vars.cpp (.h)

Contains all the definitions of the global variables.

1. tttools.cpp (.h)

Contains two tool functions:

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| void init() | initialize important global variables. |
| int get\_input() | ask the user for a valid input. |

1. process.cpp (.h)

Contains 12 functions that used to manage different steps during the game:

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| void welcome\_message() | Prompt welcome ASCII art image. |
| void rule\_message() | Prompt the rule of the current mode. |
| void goodbye\_message() | Prompt the goodbye ASCII art image. |

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| bool start\_game() | Ask the user to start or quit the system. |
| void choose\_mode() | Ask whether to play with a friend or computer. |
| void roll\_a\_dice() | Prompt and then start to roll a dice automatically. |
| bool check\_state() | Check it’s whose turn or who wins or draw. |
| void show\_state() | Show the state on the screen. |
| void show\_board() | Show the gameboard with or without position IDs. |
| void update\_screen() | Call show\_state() and show\_board() at once. |

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| void player\_move() | Ask and receive a valid move command |
| void move() | Manage the move order and execute special command (gameboard ID switch) |

1. aigorithm.cpp (.h)

Contains 4 functions that implement the minimax algorithm.

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| int evaluate() | Evaluate the gameboard and return the score of such case. |
| bool is\_full() | Check whether the gameboard is full. |
| int minimax() | The implementation of minimax algorithm. |
| void ai\_move() | Simulate computer player by connecting the minimax algorithm |