

Executive summary

Chinese chess

1. Brief introduction and basic rules

Basic knowledge:

1. Pieces: There are 7 types: King, Advisor, Elephant, Rook, Cannon, Horse, and Pawn.
2. Rules: Pieces can move and capture according to their individual ability and restriction along the lines including the "Riverbanks". It is noteworthy that it has some limitations such as King, Advisors must move inside their own Palaces, Horses and Elephants can be blocked (from moving), two King cannot "face" each other (stands in the same column without any piece between). Moreover, 3-FOLK rules need to be followed: when a position repeated 3 time (3 folks) the game will be terminated.

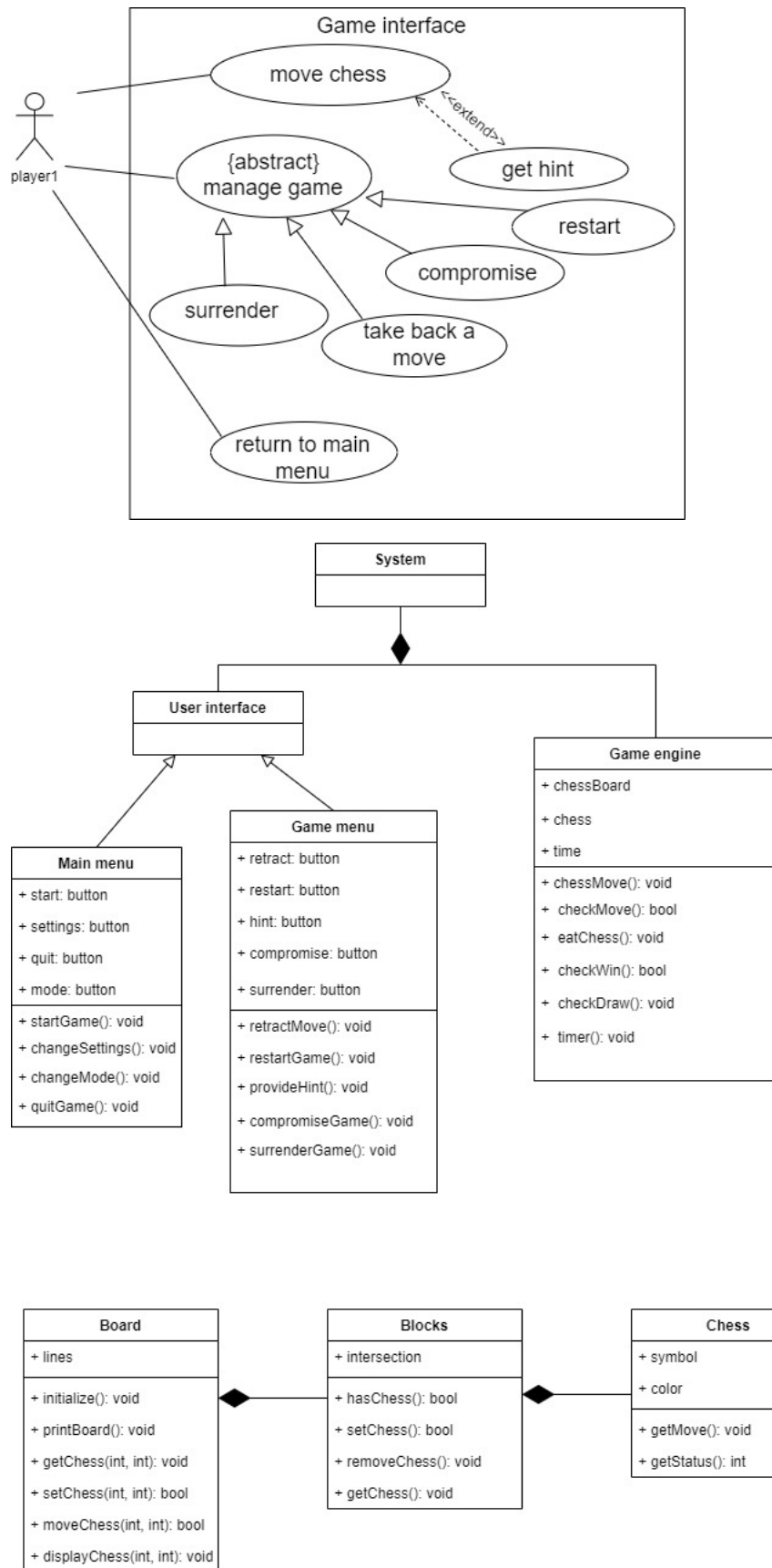
Basic functions:

1. After entering the APP, the GUI offers the player some choices like starting game, settings, quitting the APP, changing game modes(man-machine, man-man, online game(optional)).
2. If the player starts the game, then the main page jumps to the game page. The game page should contains the retreat button, restart button, hint button(optional), compromise button, surrender button. Also, we need to show the time on top of the page since we should limit the time per move.

Matters need attention:

1. Chess needs to be displayed in the chessboard, it can't move out the chessboard and must be addressed on the intersects.
2. The two players can't move at the same time.
3. The game needs to be ended following the 3-FOLK rule, ending in the draw. Otherwise, the game can't end.

2. UML



3. Requirement list

The player can play Chinese chess on the APP

1. The player should be able to click the icon and start the game.
2. The player should be able to push every button of the main menu. And different button will display different interfaces.

start-->game interface

settings-->setting interface where player can change language, volume, etc

mode--> mode interface where player can choose mode(optional)

quit-->quit game successfully

3. The player should be able to choose and move chess in the game correctly (must follow the rules), and two players can't do these things at the same time. When player moves chess, the chess cannot be moved outside the chess board or anywhere against the rule. Also, the chess cannot overlap when being moved, one must be eaten by another or the move is invalid. Each time, only one chess can be moved.
4. The player should be able to push every button of the game menu. And different button should display their different functions.
5. The game board should update every turn. (after moving chess , eating chess...)
6. In each turn, time is limited.
7. The APP should be able to determine whether the player wins or whether the game is a draw.
8. When the game ends, the player can return to the main menu.

Optional things