General Game Stuff

* Obviously we want an option for someone to continue playing the game at the end and some general introduction things
* This of course also includes the process of drawing the board and making a GUI

Board

* Shogi has a 9x9 board, so I’ll represent this with a 2d list that’s also 9x9
* To represent the locations on the board, we’ll just use the standard x, y coordinates

Hand

* Shogi is unique in that players have a hand of pieces taken and they can drop them back on the board at any time
* This will be represented by a class list since we just need to store all the pieces that’d we’ve taken

Class: Piece

* This class will be used to house each piece on the board
* These pieces should have a couple of properties
  + Which team the piece is on
  + The coordinates of the piece
  + The image of the piece
  + The promoted image of the piece
  + Whether or not the piece is promoted or not
  + Whether the piece is dead or in the hand

Specific Pieces

* We will use inheritance to make each piece have its own class
* Each of these classes will have their own unique function that will return the valid moves of that piece(promoted and not promoted)
* So when a user clicks on the tile, the piece automatically returns the valid moves so the main function can utilize that

Move/Take Pieces

* This will be a function that will use the info from each piece and move the tile accordingly
* Of course this function also needs to check if there is another piece occupying the spot, and if so then we need to take those pieces off the board and label them as dead.

Dropping Pieces

* This is bringing a piece that you took and putting it back on the board
* There are 3 things we need to check
  + Can the piece actually move after you put the piece there
  + If you’re dropping a pawn, is there another unpromoted pawn in the same column
  + If you drop a pawn there, will it cause a checkmate
* If these are all fulfilled, we can change the status of the piece to on the board, and remove it from the hand list
* Also no matter where you drop it, for that turn it’s unpromoted, so you have to wait until the next turn

Promotion

* If any piece other than a gold general reaches the final last 3 rows, they can be promoted
* So we need to change the moveset, also we need to change the image of the piece