Chess
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APCS1 pd 5
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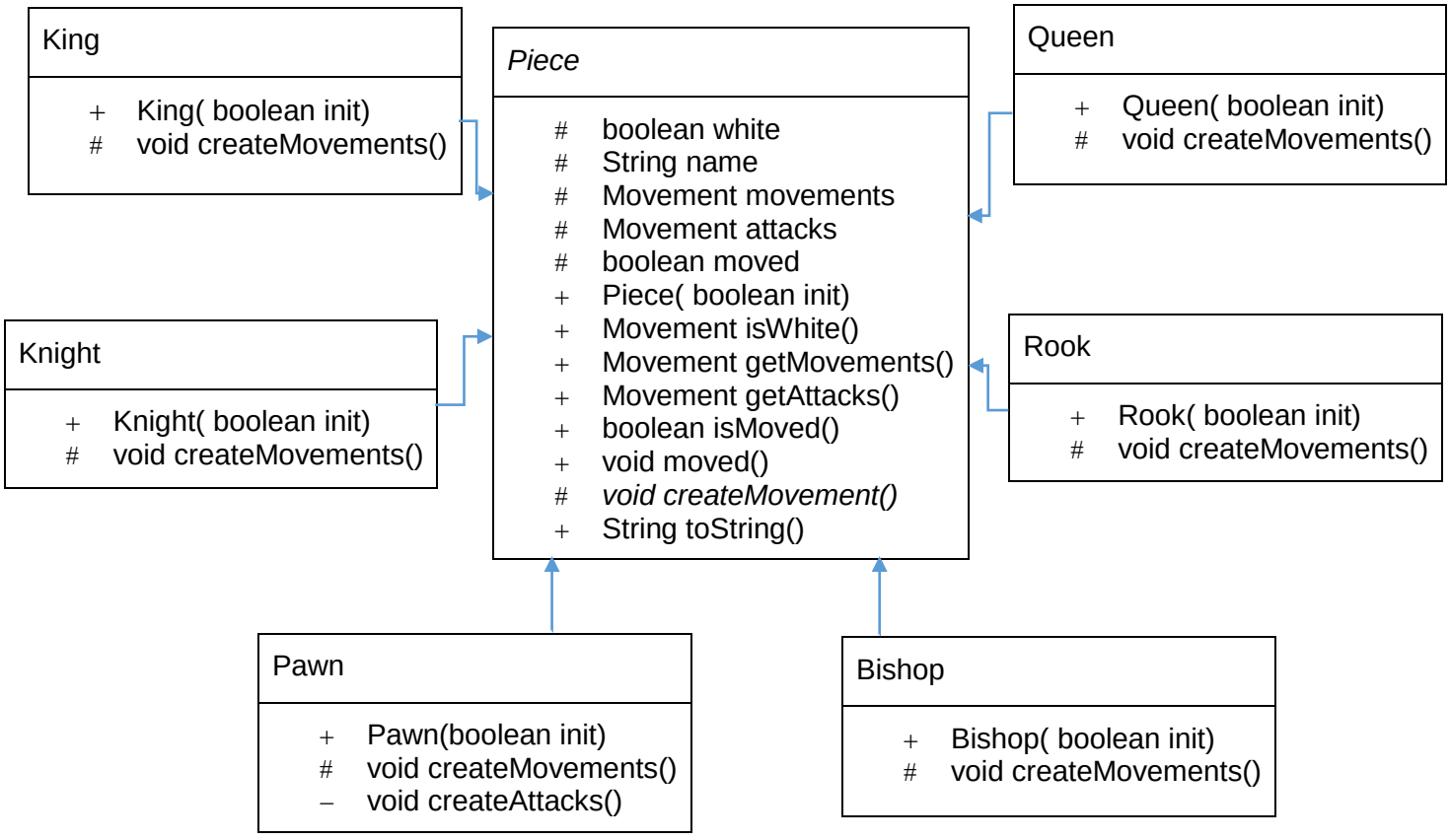
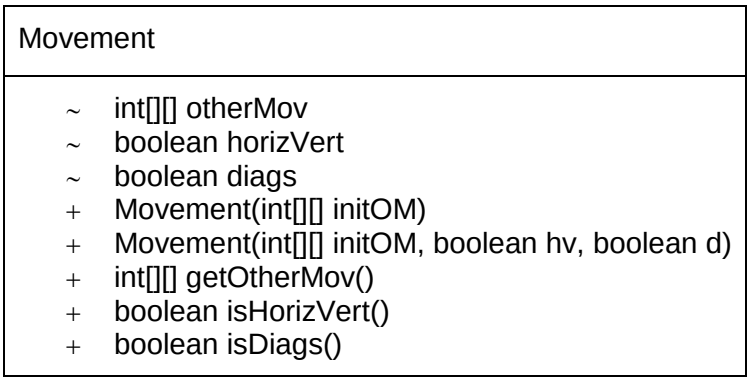
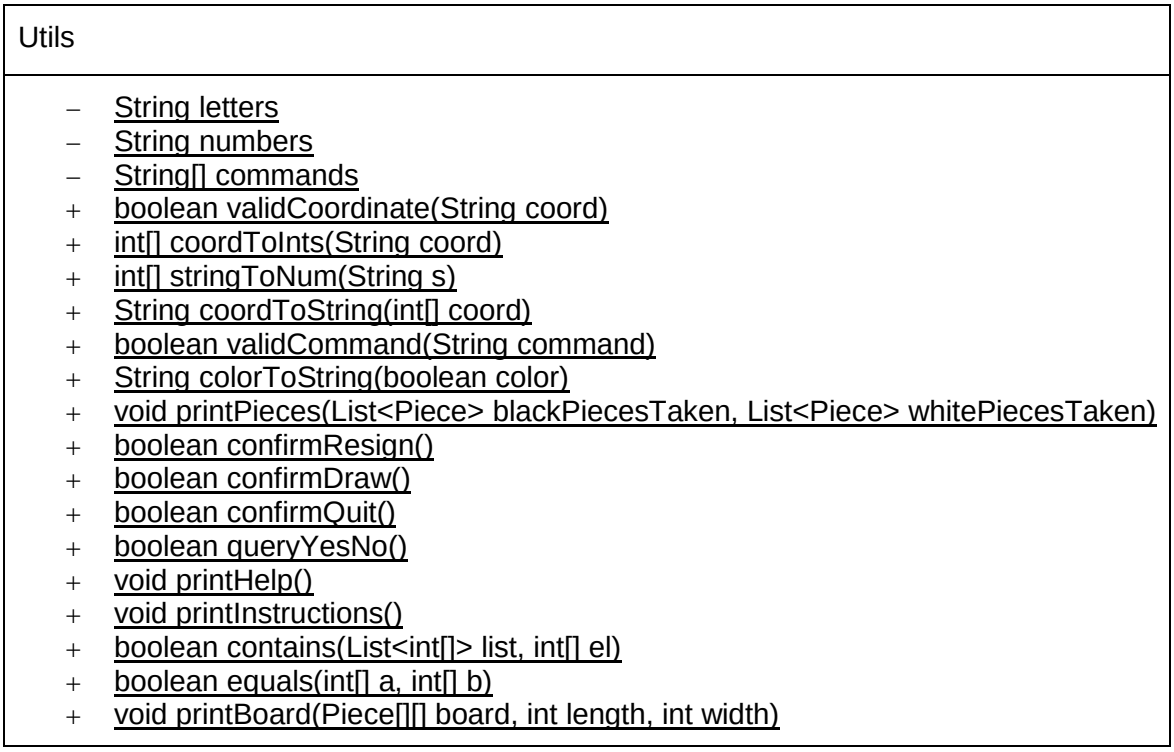
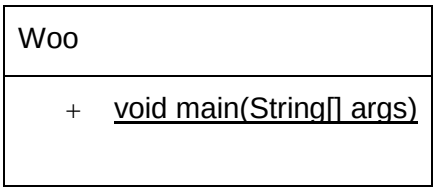
Chess UML Diagram





Chess
− Piece[ ][ ] board − int[][] lastMove − String history − List<Piece> blackPiecesTaken − List<Piece> whitePiecesTaken − boolean continuePlaying + Chess() − void populateBoard() − void setBoardPiece(int x, int y) + void play() − boolean turnMove(int[] from, int[] to, Piece pFrom) + boolean isPosMove(int[] from, int[] to) + boolean isLegalMove(int[] from, int[] to) − boolean simulateLegalMove(int[] from, int[] to) + void move(int[] from, int[] to) + boolean isSpecialMove(int[] from, int[] to) + boolean isLegalSpecialMove(int[] from, int[] to) + boolean doSpecialMove(int[] from, int[] to) − boolean promotePawn(int[] coord) + boolean inCheck(boolean color) + boolean noLegalMoves(boolean color) + List<int[]> legalMoves(int xCoord, int yCoord) + List<int[]> selectLegalMoves(int xCoord, int yCoord, List<int[]> posMoves) + List<int[]> posMoves(int xCoord, yCoord) + List<int[]> posMoves(int xCoord, yCoord, boolean attack) + List<int[]> posMoves(int xCoord, yCoord, List<int[]> posMoves, int dx, int dy, boolean attack) + boolean checkAddPosMoves(int xCoord, int yCoord, List<int[]> posMoves, int x, int y, boolean attack) + void addSpecialMoves(int xCoord, int yCoord, List<int[]> posMoves, boolean attack) − void addCastling(int xCoord, int yCoord, List<int[]> posMoves, boolean attack) − void addCastling(int xCoord, int yCoord, List<int[]> posMoves, Piece p, int kingEnd) − boolean isEmptyBetween(int xStart, int yCoord, int xEnd) + void updateLastMove(int[] from, int[] to) + void addHistory(int[] from, int[] to) + String historyString(int[] from, int[] to) − String restrictiveName(Piece p) + void checkAddPiecesTaken(int[] coord) + boolean doCommand(String command) + void printBoard()


Utils
- String letters
- String numbers
- String[] commands
+ boolean validCoordinate(String coord)
+ int[] coordToInts(String coord)
+ int[] stringToNum(String s)
+ String coordToString(int[] coord)
+ boolean validCommand(String command)
+ String colorToString(boolean color)
+ void printPieces(List<Piece> blackPiecesTaken, List<Piece> whitePiecesTaken)
+ boolean confirmResign()
+ boolean confirmDraw()
+ boolean confirmQuit()
+ boolean queryYesNo()
+ void printHelp()
+ void printInstructions()
+ boolean contains(List<int[]> list, int[] el)
+ boolean equals(int[] a, int[] b)
+ void printBoard(Piece[][] board, int length, int width)


Woo
+ void main(String[] args)