

Chess Design Grading Sheet

Name: _____

TA: _____

Score Max Possible

Data Structures

_____ Detailed description of data structure used to store the board configuration

_____ Detailed description of data structure used to store sets of moves

_____ Detailed description of data structure used to store move history

Class Responsibilities

_____ Piece superclass containing behavior common to all piece types

_____ Separate subclasses for each different piece type (pawn, rook, etc.)

_____ Track current piece positions on the board

_____ Store and manage the move history

_____ Initialize a new game by creating and initializing the board, move history, pieces, etc.

_____ Execute moves as directed by the user

_____ Undo moves as directed by the user

_____ Detect check, checkmate, and stalemate

_____ Save and load games

_____ Clean separation between GUI and Chess layers (i.e., no GUI-specific code in Chess layer)

Algorithms

Top-level code for the following algorithms:

_____ Detailed description of the Move Piece use case implementation (don't forget pawn promotion)

_____ Detailed description of Undo Move use case implementation

Detailed description of the Save Game use case implementation

Detailed description of the Load Game use case implementation

Detailed description of the New Game use case implementation

Design Quality

Cohesive classes and methods

Effective information hiding

Effective class, method, and variable names

Clear, easy-to-read document

_____ **Total**