

Software Design Document

for

Chess

Version 1.0

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|  | Date: October 28, 2016 |
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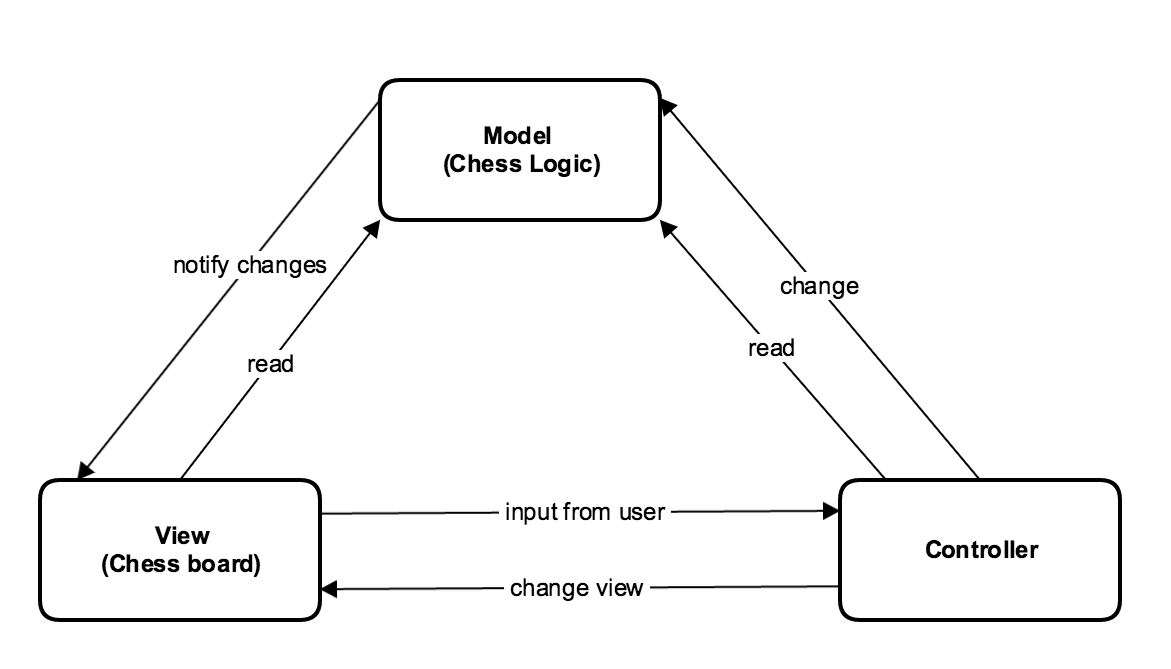
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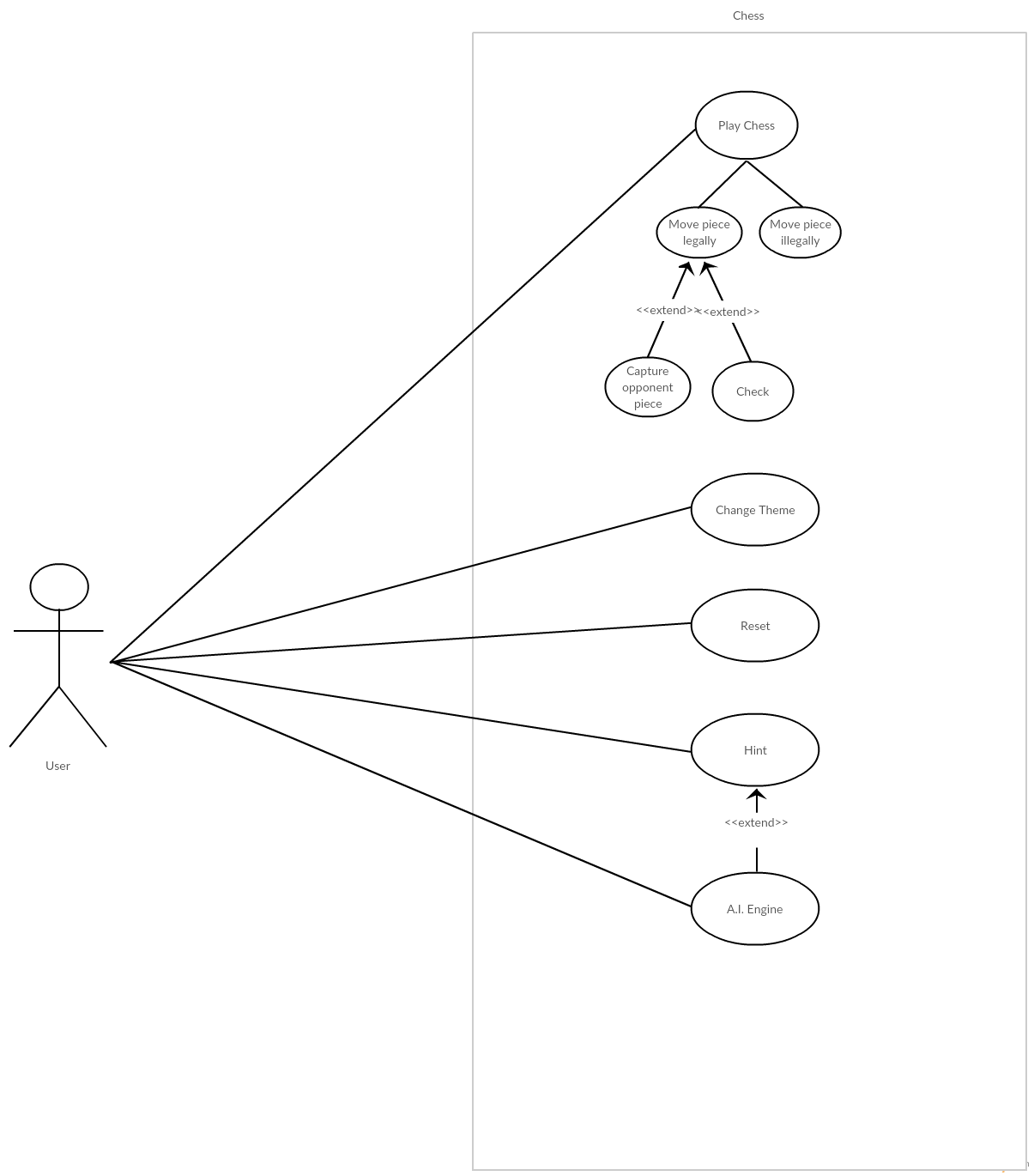
# ARCHITECTURE DIAGRAM

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The architecture design outlines the general layout for the chessboard functionality

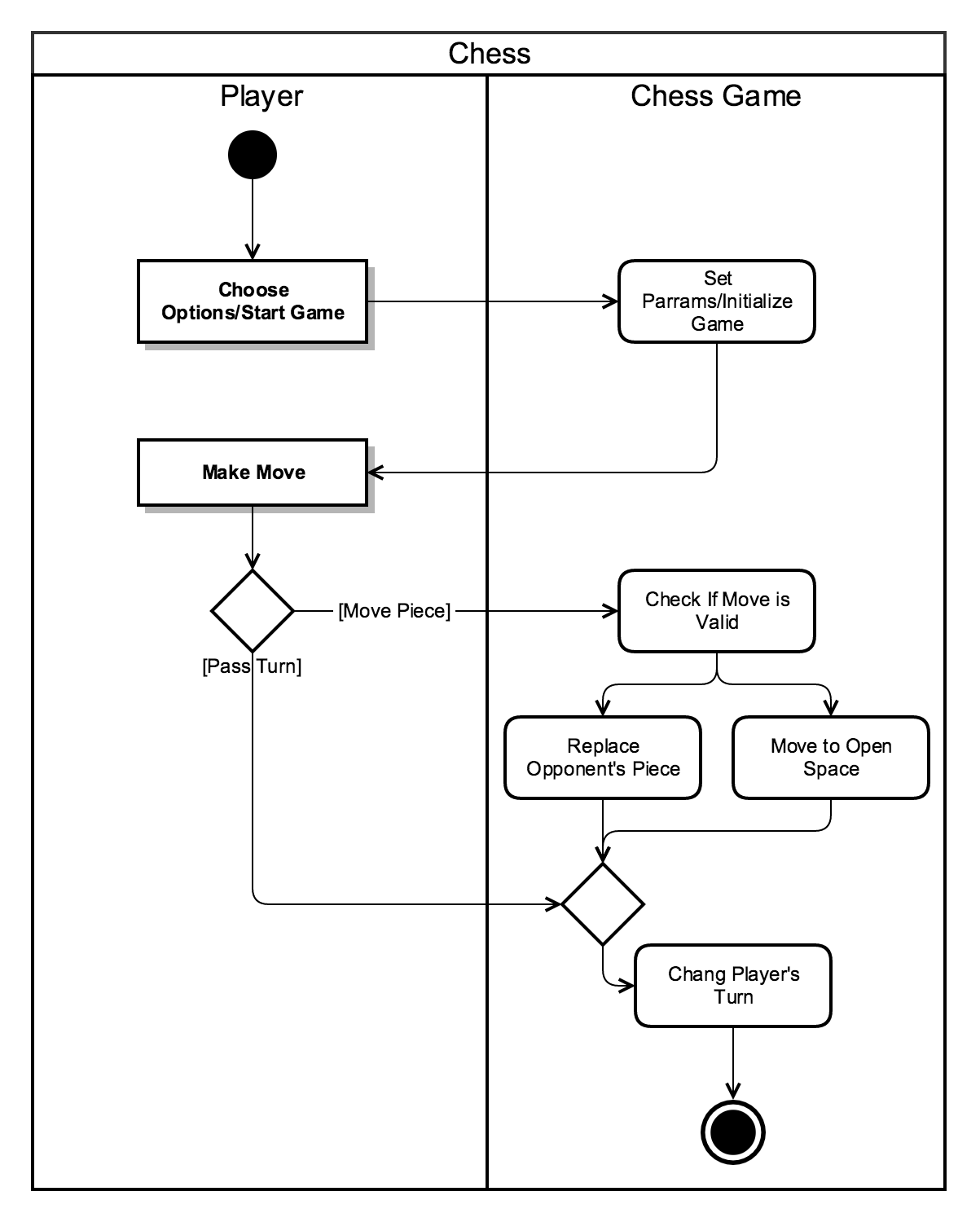
1. When the user lauches the game, the view of the chess board will appear. It will be a top down view of an 8x8 checkered game with 16 pieces per color. The white pieces will be at the bottom and the black pieces will be at the top. There will be options for the user to choose in the settings menu on whether or not said user would like to do player vs player or player vs computer. With the computer as the opponent, the user will be allowed to select a difficulty. This will be the only window available for viewing by the user.
2. The controller will be the middle man between the user and the Chess game logic. The user will not have access to this. Any input given by the user will go through the controller which will pass on the information to the chess model.
3. The Model (Chess Logic) is where all the rules and regulations controlling the logic of the game will be held. This will not be availible to the user.

# USE CASE DIAGRAM



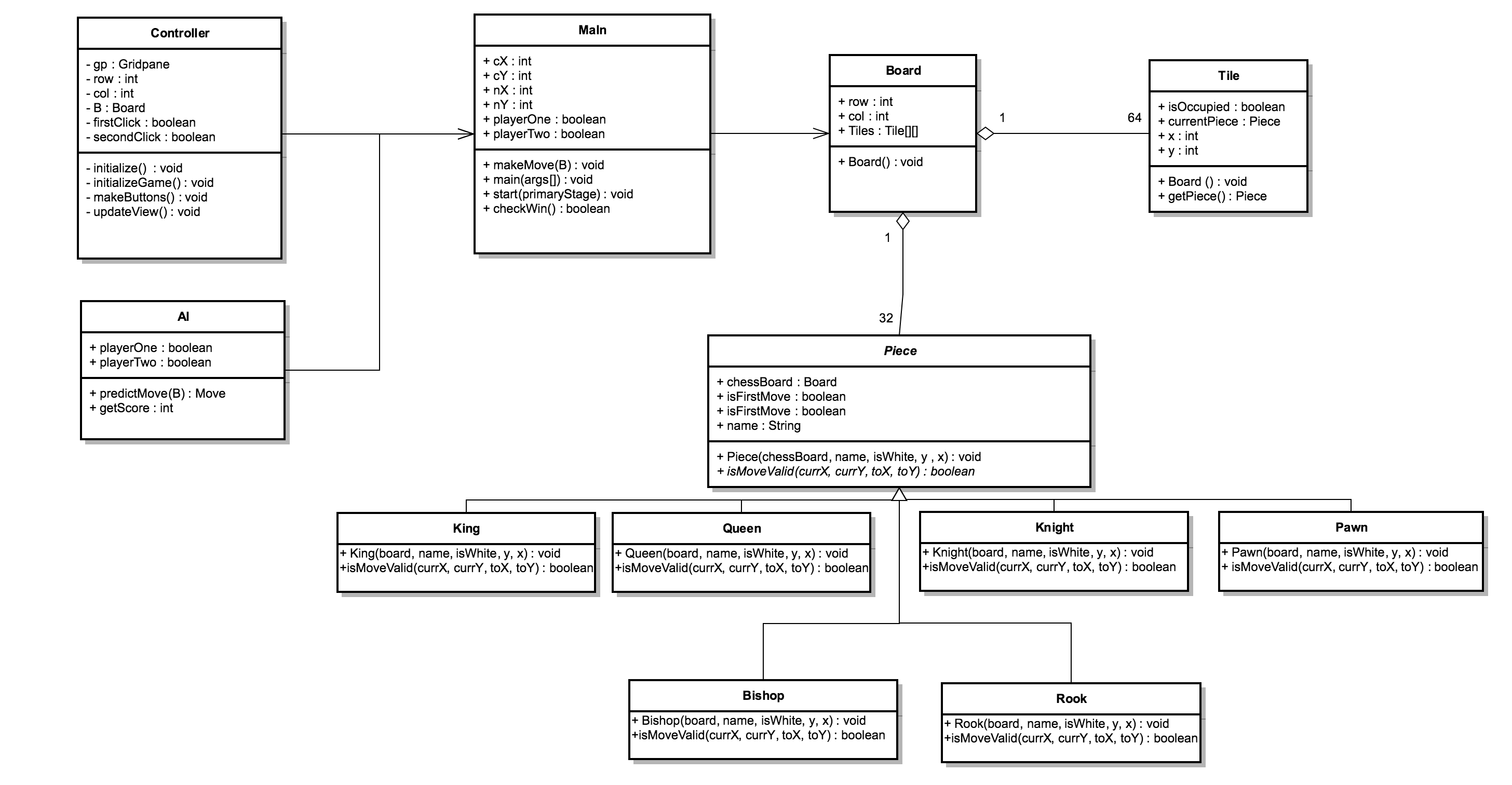
The use case diagram outlines the typical users of the system. There will typically be 1-2 users who will have access to chess game inputs and chess game settings. This diagram is unchanged from the version presented in the software requirements specifications.

# ACTIVITY DIAGRAM



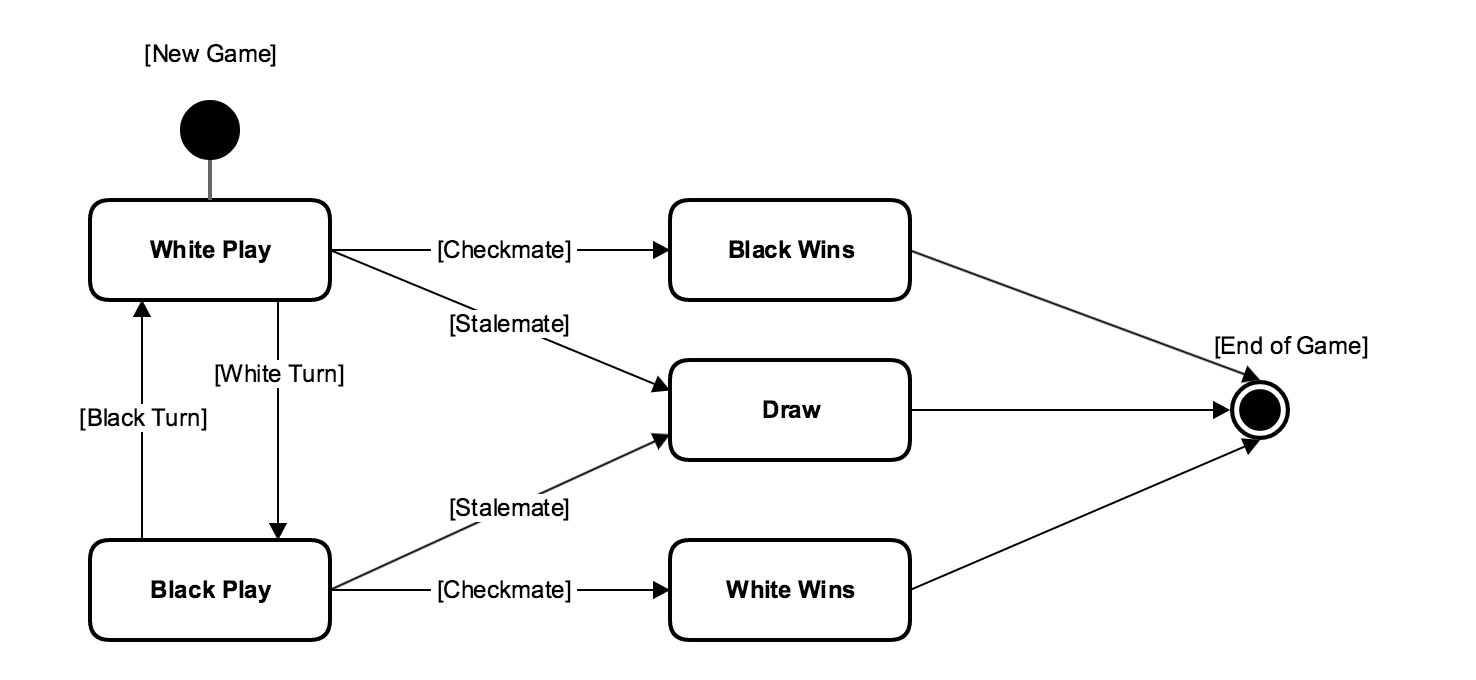
The activity diagram represents a high level overview of the basic functionality the Chess game will provide.

# CLASS DIAGRAM



The class diagram on the previous page oulines the major classes which comprise the Chess game logic and methods in which to comprise them. This diagram is intedned to act as a template to begin developing the system around, but the structure of the system is subject to change as needed while development progresses.

# STATE DIAGRAM



The state diagram shows an overview of the expected behavior of the system at certain points of the game. The majority of the states will consist of the players alternating turns to come to a conclusive winner or stalemate. Either conclusion will bring the game to an end.

Appendix B - Group Log

|  |  |  |  |
| --- | --- | --- | --- |
| **Member** | **Meeting/Collaborative**  **Work Time (hrs)** | **Individual Work Time (hrs)** | **Total Time (hrs)** |
| **Daniel Maida** | 2 | 1 | 3 |
| **Nazar Stelamkh** | 2 | 1 | 3 |
| **Steven Call** | 2 | 1 | 3 |