CS351 Project 2 Design

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Main
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Game
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Player
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Board
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Mode
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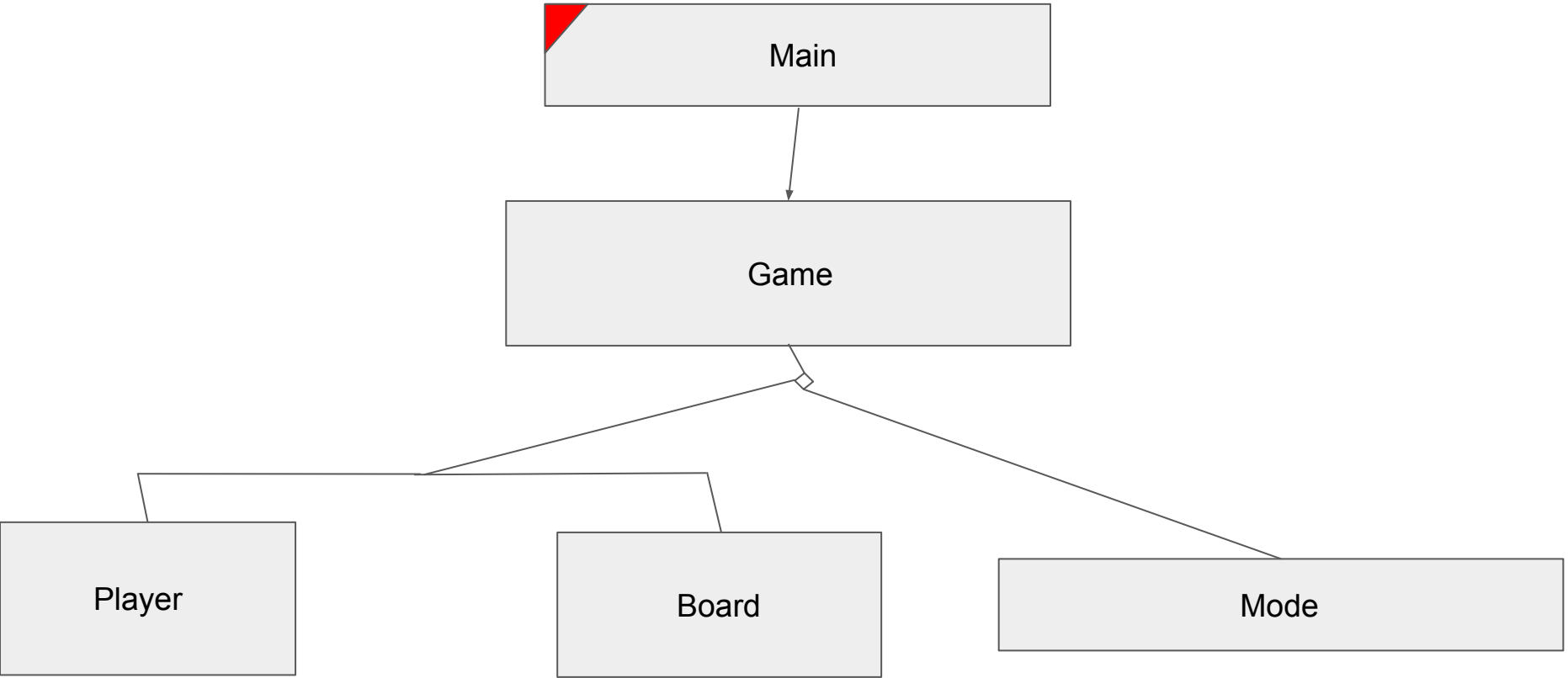
Object Description

- The Main class will start the javafx window with different modes. Clicking on one will start the mode.
- The Game class will be an concrete class where each mode is a different kind of game.
- Each mode extends the abstract class Mode and will have access to players which can be a user or computer player.
- Each mode and game will have a board that shows the pieces and possibly moves depending on the mode.
- A mode will implement a validation function and have access to players to check for valid moves and determine what players are needed.
- Player is an interface and has functions like make turn for every player.
- Each player also has a Color and move directions.

Board Design

Board

BoardPiece(1….n)

Game
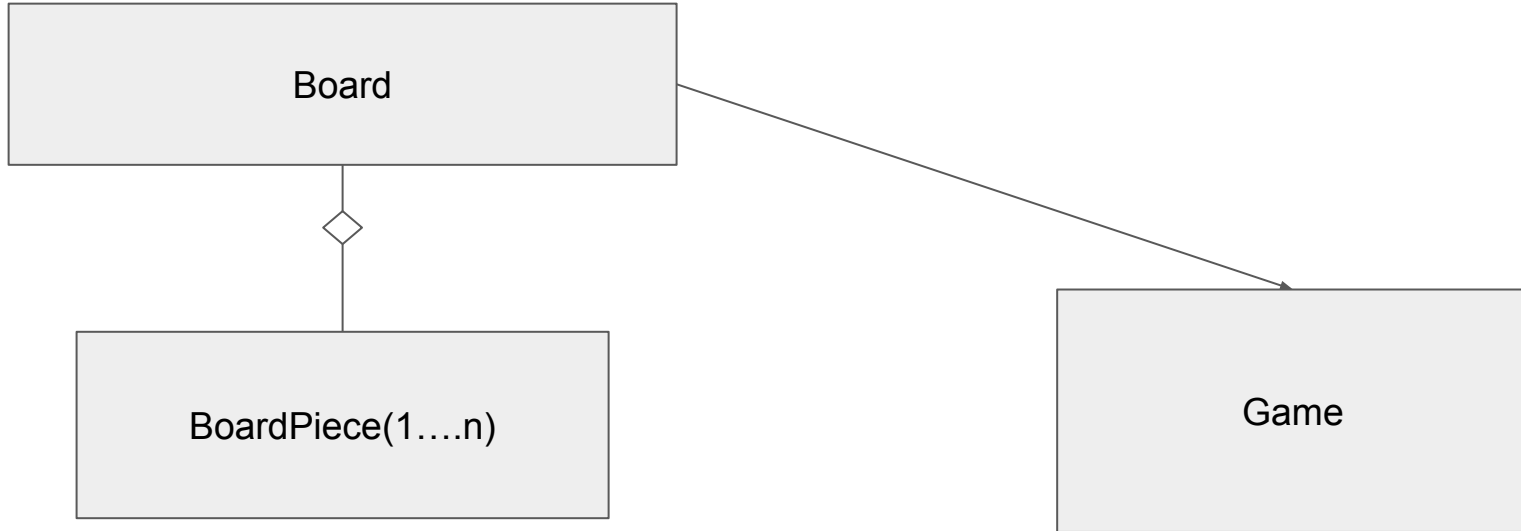
Board Description

- A board controls all things related to displaying and regulating the board such as controlling making moves and displaying the board.
- BoardPieces fill each part of the board and can only be seen by others as well as their color. But new pieces can only be created and moved by the board functions.
- The Board class will need access to a mode through the game to validate a clicking move.
- A board is composed of board pieces and also has a game field but only for calling validate in game.

Mode design
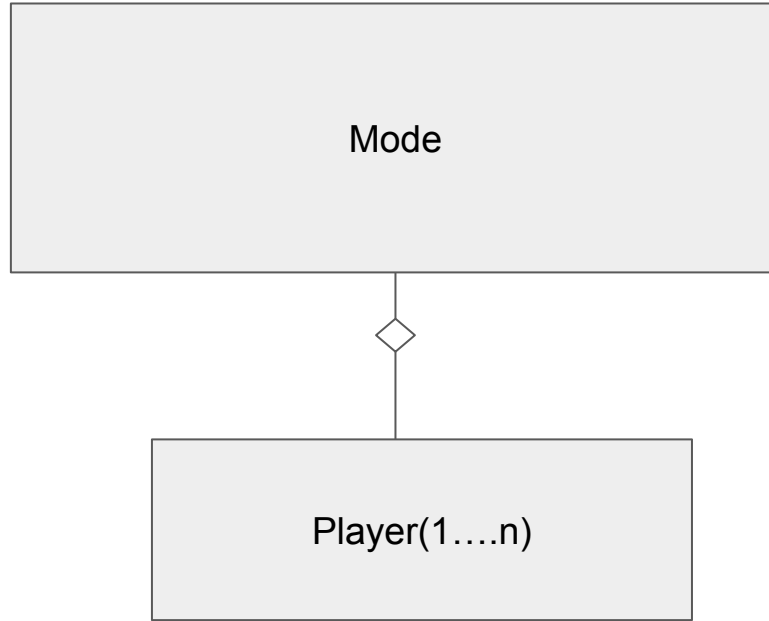
Mode description

- Mode is an abstract class and it has a list of players so it can set up players for each mode such as AI vs user or user vs user.
- Some methods need access to an array of board pieces to validate moves or the board stackpane or the borderpane of the app to add mode specific controls or visuals.