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CM674

CSSE375

Milestone 2 refactoring

# ChessView() constructor refactoring:

*Trello:* [*https://trello.com/c/D968ToRn/19-refactor-chessviewer-constructor-long-method*](https://trello.com/c/D968ToRn/19-refactor-chessviewer-constructor-long-method)

*Merge request:* [*https://ada.csse.rose-hulman.edu/zhangq2/Chess/merge\_requests/12*](https://ada.csse.rose-hulman.edu/zhangq2/Chess/merge_requests/12)

## Bad code smells And Changes:

The original ChessViewer has a long constructor to set up the UI. Since the UI has three parts – label, chess board and the console, so I “Extract Method“ from the constructor to three methods – setupChessBoard(), setupStatusLabel() and setupConsole().

The original ChessViewer has temporal variables “ConsoleListener listener” and “boolean waitForResponse” listener is only used by the setupConsole(), and waitForResponse is not used at all. There is a method notifyResponse() that is never used. Therefore, I removed those unused or unnecessary fields and methods.

When constructing the board symbolProvider is responsible for providing the sprit image for each board. However, in the past, DEFAULT\_SYMBOL\_PROVIDER was hardcoded in SquareLabel , so the ChessViewer cannot change it easily. I refactor the constructor of SquareLabel , so that the symbolProvider is injected as dependencies so that ChessViewer can alter it easily.

# Removing Chess reference in square and ChessView() constructor refactoring:

*Trello:* <https://trello.com/c/nybtqAvj/16-refactor-chess-god-class-create-board-class-with-some-functionality> *&&* <https://trello.com/c/vdR6mrff/22-refactor-remove-chess-reference>

*Merge request:* <https://ada.csse.rose-hulman.edu/zhangq2/Chess/merge_requests/11>

## Bad code smells And Changes:

In the past, Chess has multiple responsibilities. Therefore, we decided to “Extract class” out of it. Before extracting the Board class out of Chess, we must decouple Square from Chess. In the past, each Square holds a reference to Chess. We decided Square does not need to know the Chess, so we have to remove the chess reference in Square. I refactored the constructor of Piece and remove this reference.

With this change in place, Square no longer depends on Chess. Then we can extract Board out of Chess, move the 2D-array of Squares and methods related to positions within board. In the end, I added tests for the new Board class.