

Screenshots of taskboard Trello

3rd sprint

Introduction

Documentation **Work in Progress**

Class Diagram (See desc)

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Documentation

For project process, see the "Project Progress" board

☷ 1

Fully Dressed Use Case Format

Use Case Name	WikiName, start with verb
Scope	System boundaries (corp, prog)
Level	Summary, subfunction, etc
Primary Actor	Primary system user
Stakeholders	Who cares and what they want
Preconditions	Must be true to start
Postconditions	What is guaranteed by success
Main Success Scenario	Typical: unconditional path scenario
Extensions	Alternative success or failure scenarios
Special Requirements	Related non-functional requirements (RAM)
Technology & Data	Varying IO methods and data formats
Frequency of Occurrence	Is this system used often
Miseries	Open issues, eg unmanageable failure scenarios

Documentation

Fully dressed user-case diagram

☷ 1

Make an application where the user can play chess. The application has a local multiplayer mode and vs AI mode. The AI has different difficulties. On the hardest, the AI will try to best the player

UML Use Cases

```

    graph TD
        Waiter -- "receive order" --> OrderFood
        OrderFood -- "place order" --> OrderWine
        OrderWine -- "confirm order" --> CookFood
        CookFood -- "if wine was ordered" --> Chef
        Waiter -- "serve food" --> ServeFood
        ServeFood -- "if food was cooked" --> Waiter
    
```

Legg til et kort...

Technical demands

A player should be able to play against an AI-player

The application should support vanilla chess rules

A player should be able to create a profile to check all past games

The application should have a highscore system/ranking system.

Pawn

Knight

Bishop

King

Queen

Rook

Board

Legg til et kort...

Non-technical demands

Multi-platform support

GUI

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Graphics should be open source

Source code and building scripts should be open source

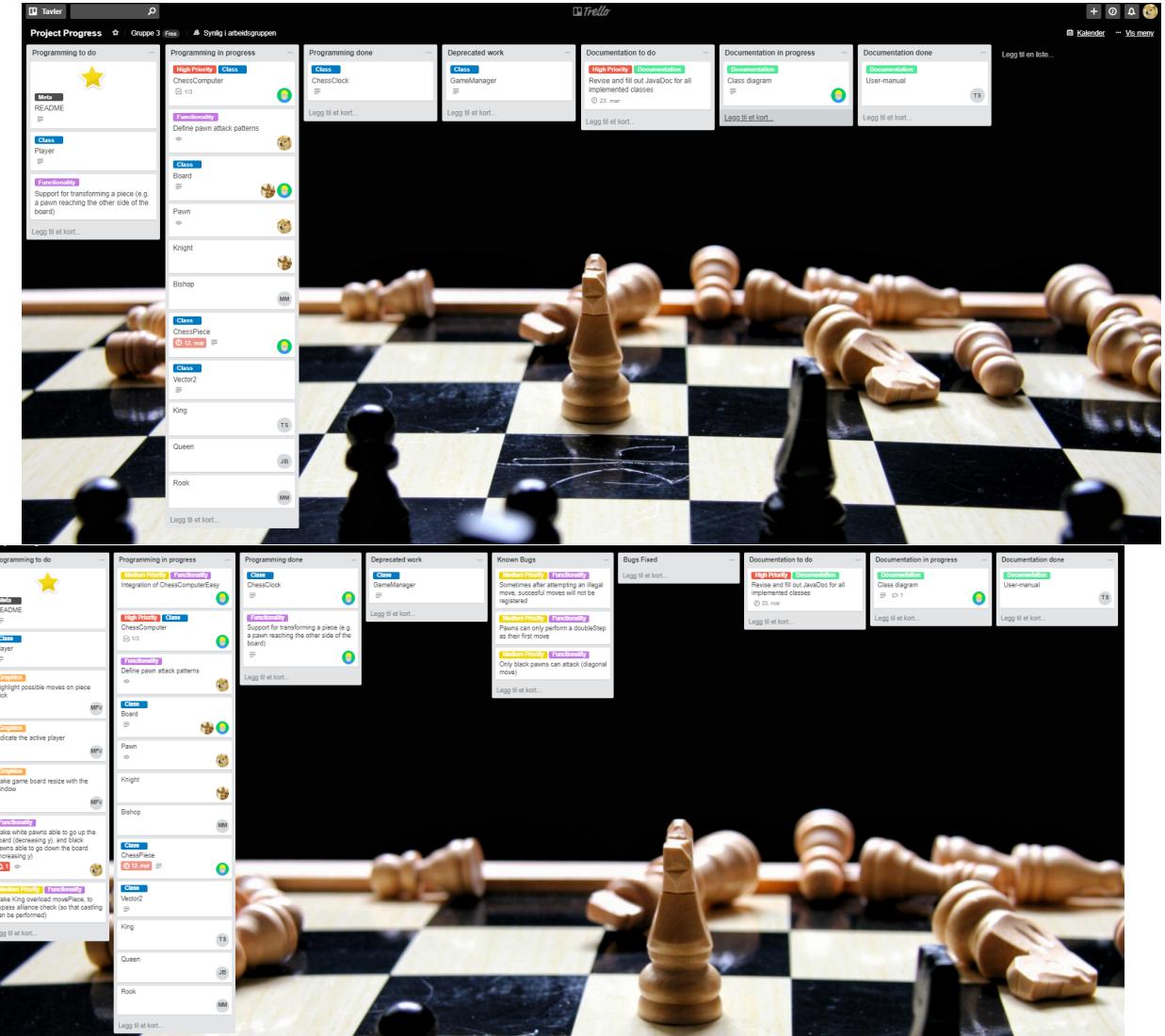
Java code should be documented in best practices using JavaDoc

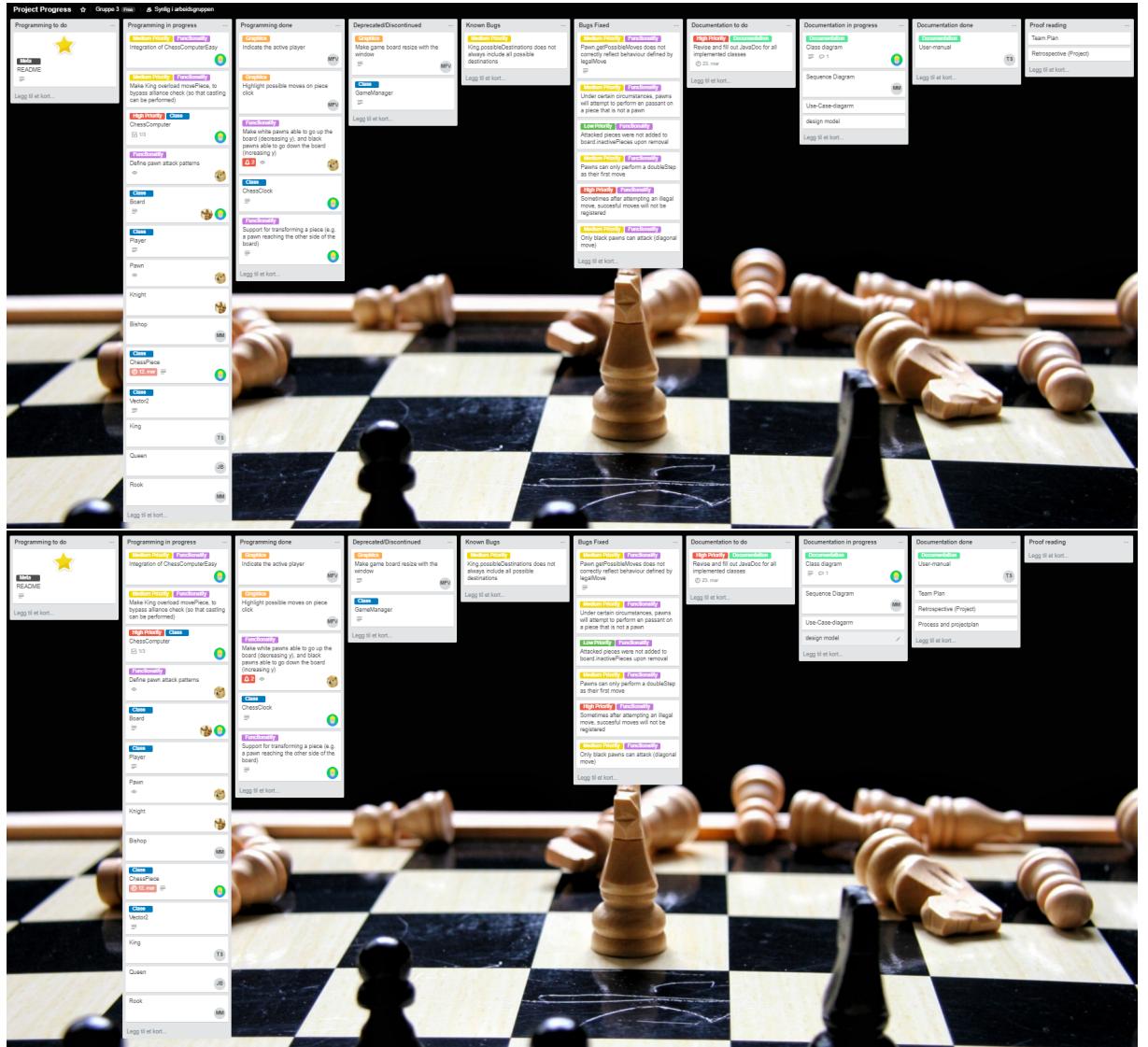
Easy AI-player should do its move in 1 second

Medium AI-player should do its move in 3 second

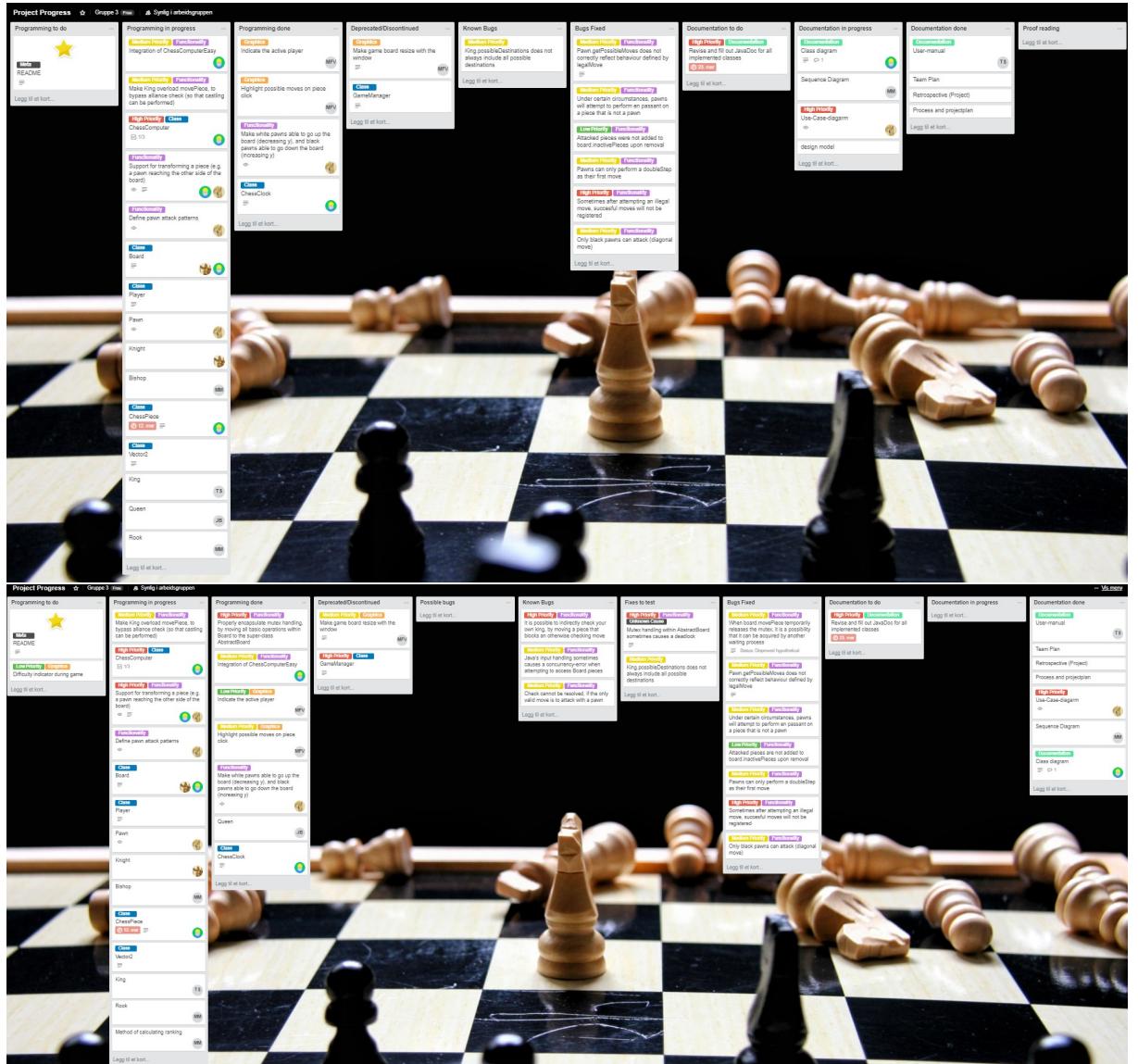
The application should be easy to expand to include different rule sets

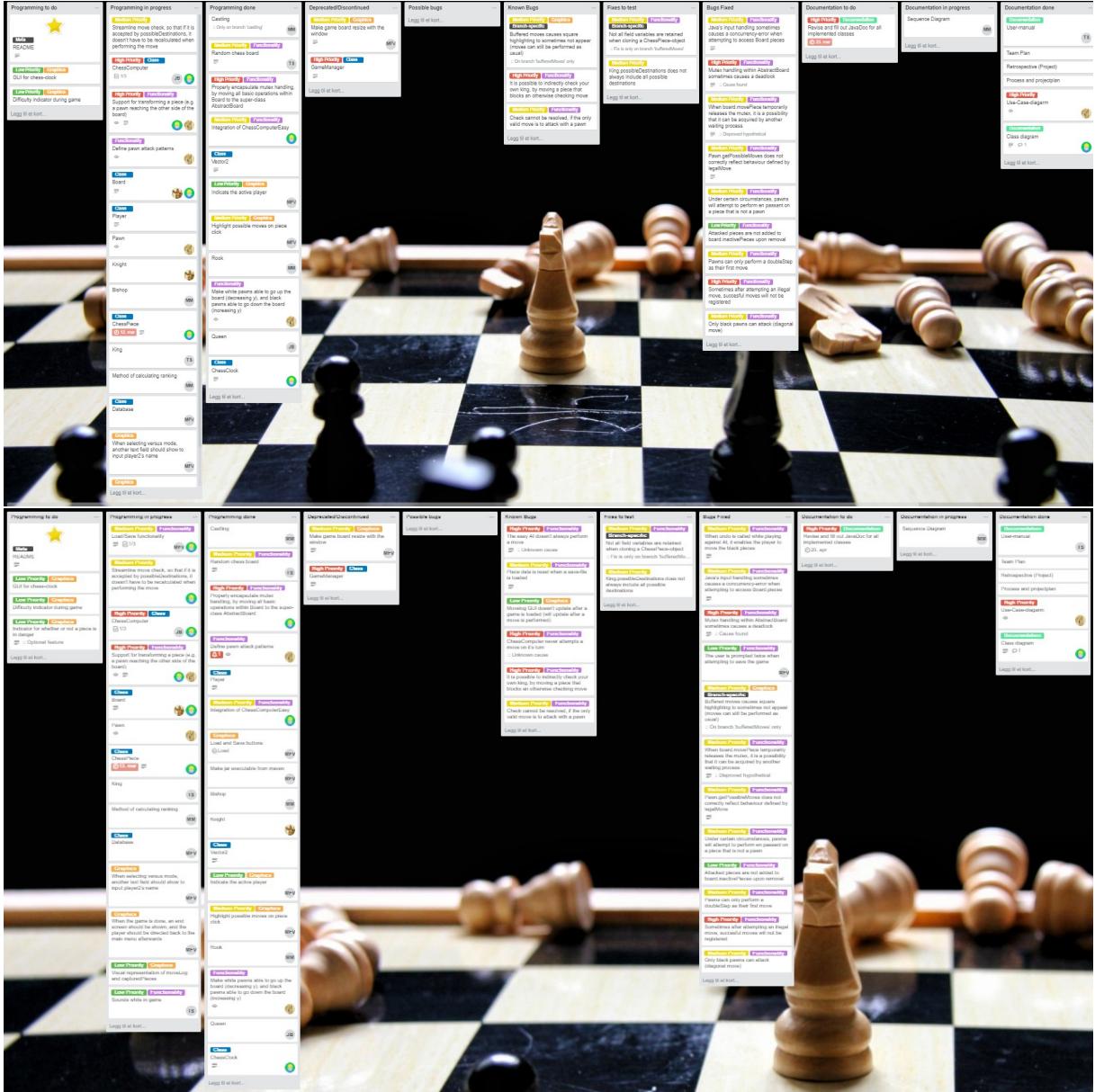
Legg til et kort...

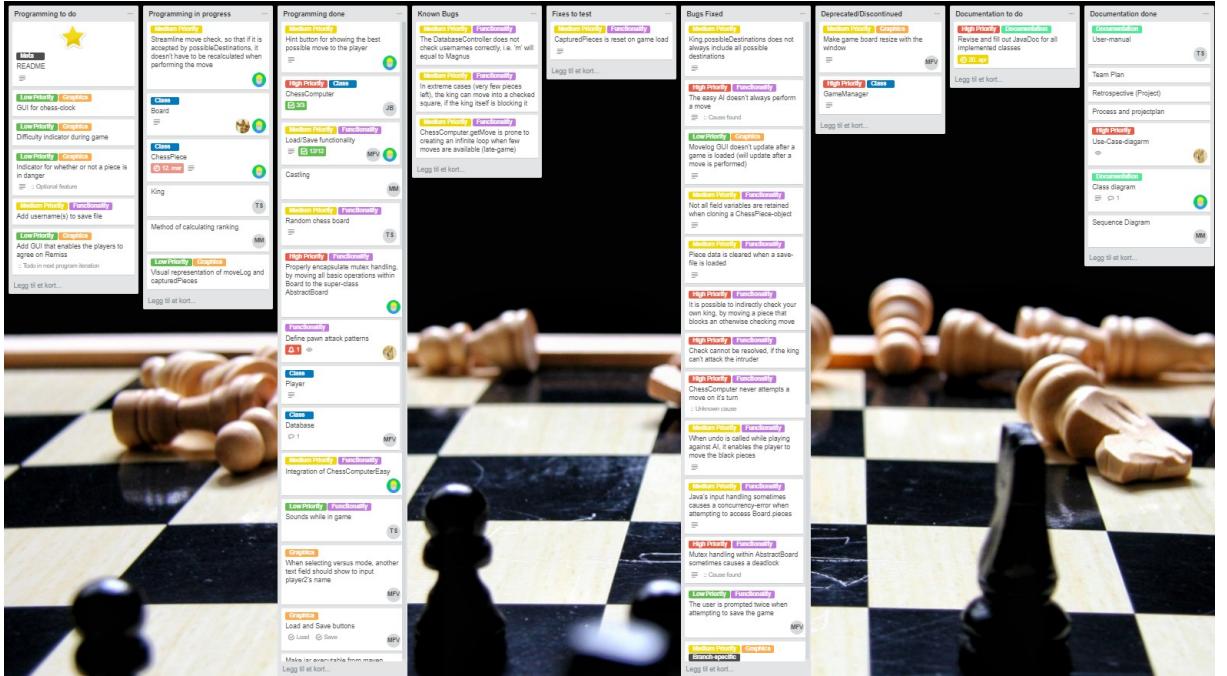


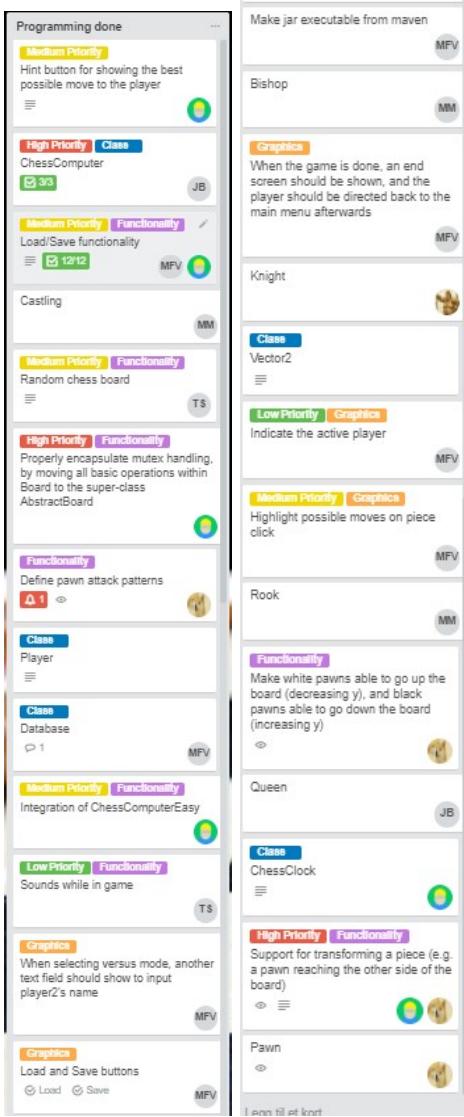


4th sprint









Bugs Fixed	
Medium Priority	King.possibleDestinations does not always include all possible destinations
High Priority	Functionality The easy AI doesn't always perform a move :: Cause found
Low Priority	Graphics Movelog GUI doesn't update after a game is loaded (will update after a move is performed)
Medium Priority	Functionality Not all field variables are retained when cloning a ChessPiece-object
Medium Priority	Functionality Piece data is cleared when a save-file is loaded
High Priority	Functionality It is possible to indirectly check your own king, by moving a piece that blocks an otherwise checking move
High Priority	Functionality Check cannot be resolved, if the king can't attack the intruder
High Priority	Functionality ChessComputer never attempts a move on it's turn :: Unknown cause
Medium Priority	Functionality When undo is called while playing against AI, it enables the player to move the black pieces
Medium Priority	Functionality Java's input handling sometimes causes a concurrency-error when attempting to access Board.pieces
High Priority	Functionality Mutex handling within AbstractBoard sometimes causes a deadlock :: Cause found
Low Priority	Functionality The user is prompted twice when attempting to save the game
Medium Priority Graphics Branch-specific Buffered moves causes square highlighting to sometimes not appear (moves can still be performed as usual) :: On branch 'bufferedMoves' only	
Medium Priority	Functionality When board.movePiece temporarily releases the mutex, it is a possibility that it can be acquired by another waiting process :: Disproved hypothetical
Medium Priority	Functionality Pawn.getPossibleMoves does not correctly reflect behaviour defined by legalMove
Medium Priority	Functionality Under certain circumstances, pawns will attempt to perform en passant on a piece that is not a pawn
Low Priority	Functionality Attacked pieces are not added to board.inactivePieces upon removal
Medium Priority	Functionality Pawns can only perform a doubleStep as their first move
High Priority	Functionality Sometimes after attempting an illegal move ⁹ , successful moves will not be registered
Medium Priority	Functionality Only black pawns can attack (diagonal move)
King references within board falls out of sync when cloning the board	