**Design Decision Made**

**Milestone 3**

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| **Design Decision** | **Why it Was Made** |
| Creation of separate solver package | To keep it separate from the rest of the code to be called on when needed. |
| Undo and redo | Created in the Game class.  Undo and Redo are both created as stacks of type move. This way it stores all the move that are made in FILO so you are able to grab the last move made as it will be at the top of the stack. The undo stack stores all the moves made by the user, and redo stores all the moves undone by the function undomove(). |
| trySwapPiece() | We broke this method up, and created 3 new methods, assigning each method with 1 task, this way we can have better cohesion.  Also renamed to canSwapPiece() because that name is more accurate to its current function. |
| Breadth-First Search for solver | We decided to use a breadth-first search as it will always find the shortest path to the solution and not just a path to the solution. |