

OBJECT-ORIENTED PROGRAMMING

PROJECT REPORT

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INTRODUCTION

- A clone of the famous game of Tetris.
- Written in Java using Eclipse IDE.
- Sourcecode is managed using GitHub for changes and updates.

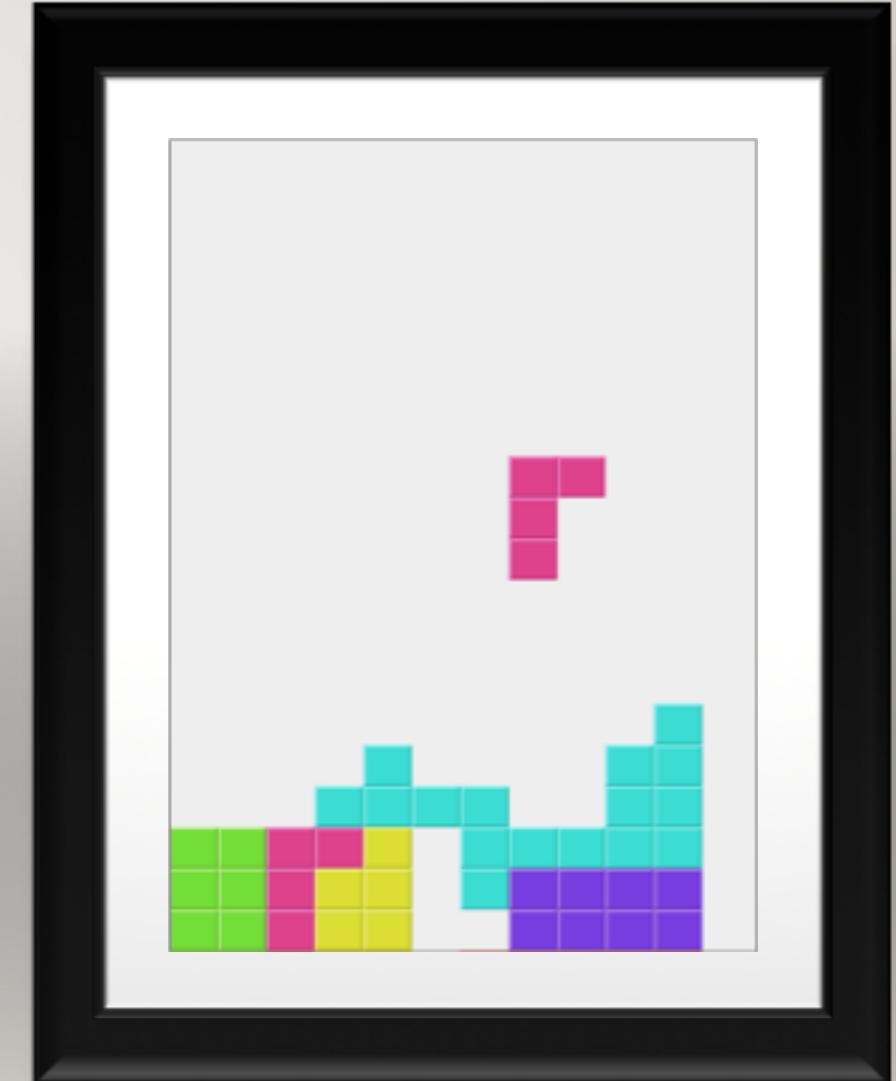
THE BASICS OF THE GAME

- The game includes many random shapes of brick called Tetrominoes (Z,S, L, Inverted-L, Block,...)
- The bricks fall continuously down to the bottom of a game board, it only stop when it land on the bottom or on top of another brick.
- The brick can be moved left – right and can be rotated while it is still falling. However, if the bricks are at the left or right edge of the board, it can't be rotated.
- When the bricks fill a full line, that line will be cleared and counted as a point. The game will be over when a brick is stacked to the top limit of the board.

CLASS DIAGRAM OF THE GAME

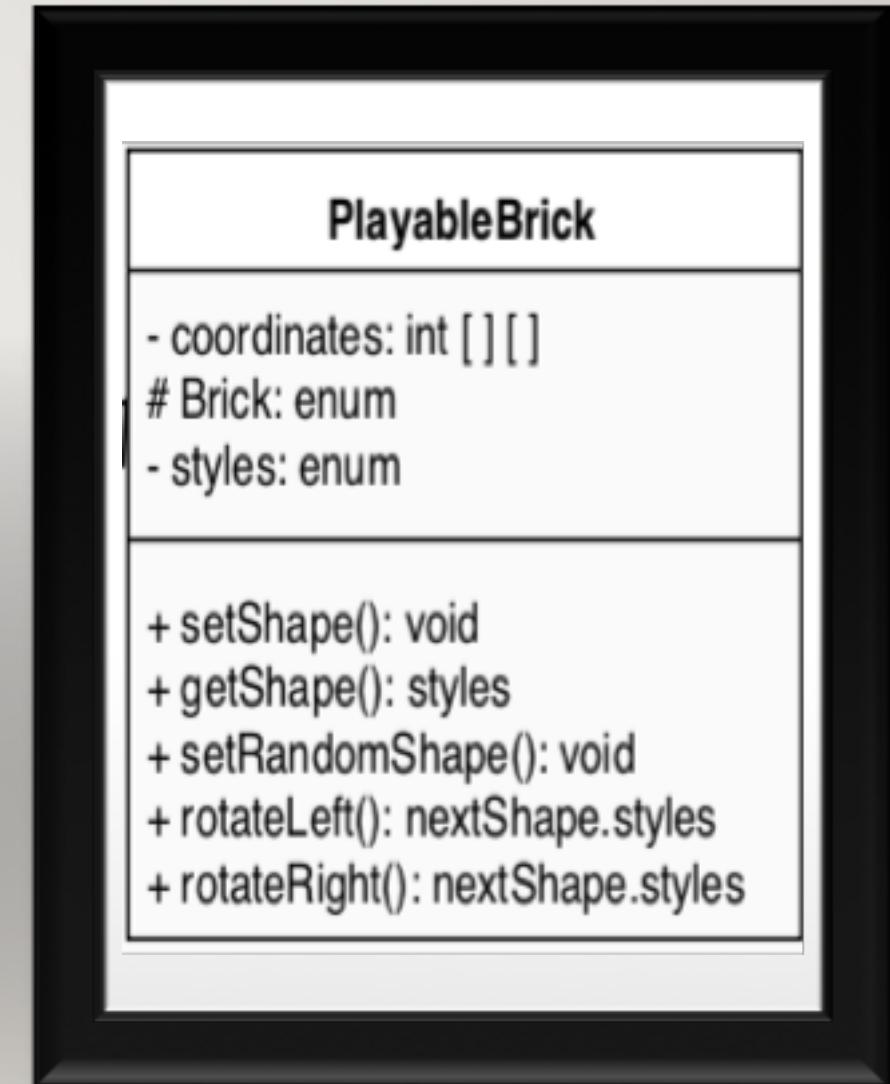
The game consists of 3 classes:

- PlayableBrick.java
- StackingBoard.java
- MainGameControl.java



PLAYABLEBRICK.JAVA

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- Generate objects of Bricks.
 - Function of Rotation
 - Generate random Bricks



STACKINGBOARD.JAVA

- Rules of the game.
- Moving of the Bricks.
- Game Paused, Game Over, Score.



MAINGAMECONTROL.JAVA

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- Initiate UI
 - The parent of StackingBoard.java
 - Hold main function for launching game.

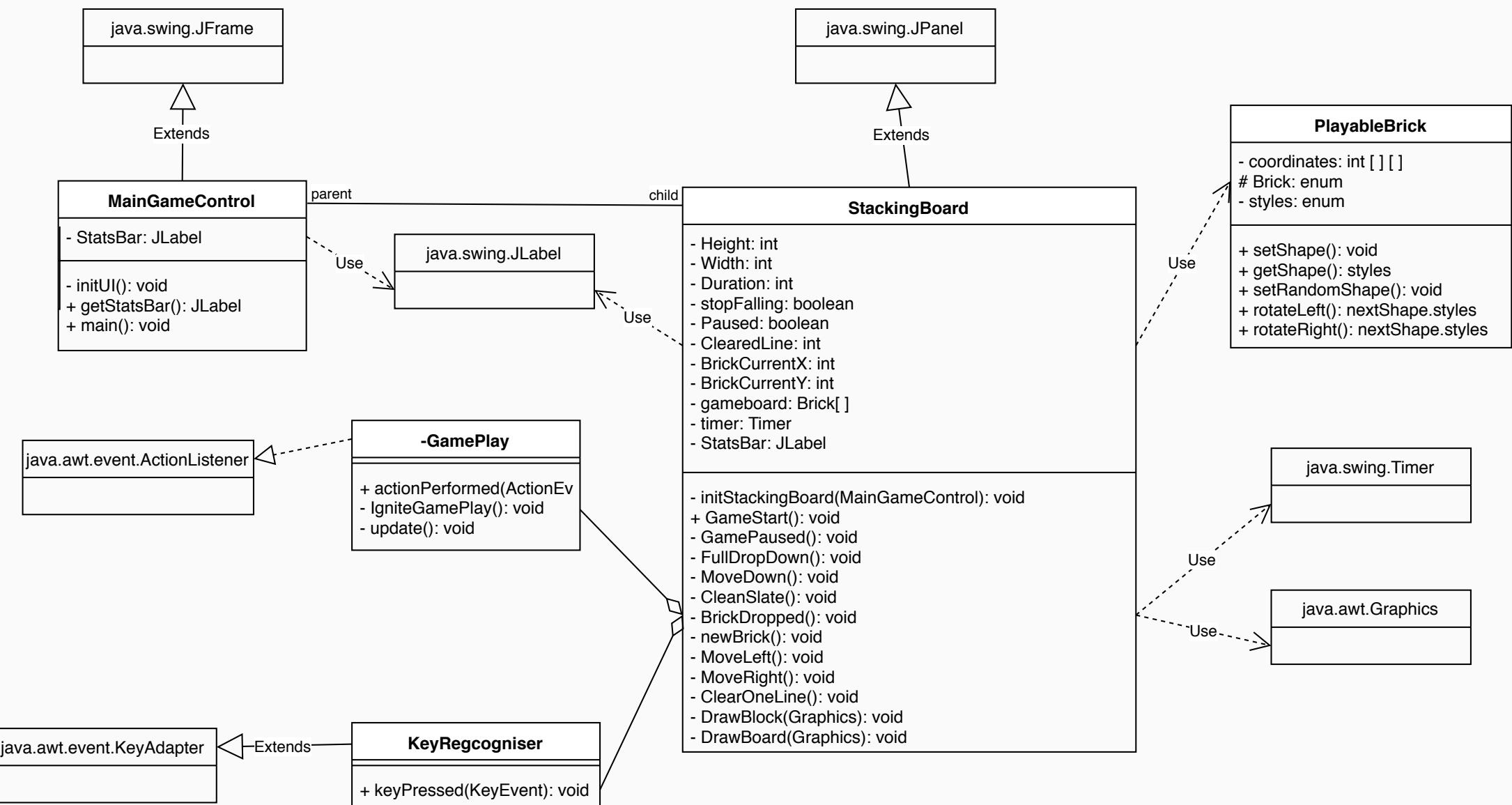
MainGameControl

- StatsBar: JLabel

- initUI(): void

+ getStatsBar(): JLabel

+ main(): void



DEMONSTRATION

APP SOURCECODE REVIEW AND DEMONSTRATION OF GAMEPLAY