

BoardIsFullException	
Responsibilities <ul style="list-style-type: none">• Exception thrown to handle when a tile is being added to the gameboard(grid) which is already full of tiles	Colaborators <ul style="list-style-type: none">• None

Board	
Responsibilities <ul style="list-style-type: none">• Holds the 4 by 4 board• Holds the tile in each spot• Replaces Tiles	Colaborators <ul style="list-style-type: none">• Tile

Movement	
Responsibilities <ul style="list-style-type: none">• Moves the Tiles• Checks if Tiles collide when moved	Colaborators <ul style="list-style-type: none">• Board• GenerateTile

Tile	
Responsibilities <ul style="list-style-type: none">• Holds the int value of the tile• Holds the x and y position of the tile in the grid	Colaborators <ul style="list-style-type: none">• None

FXMLController	
<ul style="list-style-type: none">• Formats the javaFX scene with the board• Handles "W,A,S,D" controls for movement• Handles Popups for whether player wins or loses	Colaborators <ul style="list-style-type: none">• Board• GameManager• Movement

OutOfBoardException	
Responsibilities <ul style="list-style-type: none">• Exception thrown to handle when a tile is trying to be moved outside of the boundaries of the gameboard(grid)	Colaborators

TileisOccupiedException	
Responsibilities <ul style="list-style-type: none">• Exception thrown to handle when a tile is trying to be moved into a position occupied by another tile	Colaborators <ul style="list-style-type: none">• None

GenerateTiles	
Responsibilities <ul style="list-style-type: none">• Create the numbers 2 or 4 in random places which are	Colaborators <ul style="list-style-type: none">• Board

GameManager	
Responsibilities <ul style="list-style-type: none">• Checks if the player has won• Checks if the player lost• Check if Tile needs to be generated in an empty position	Colaborators <ul style="list-style-type: none">• GenerateTiles• Board• Movement

FXMLMain	
Responsibilities <ul style="list-style-type: none">• Sets the scene to 2048.fxml• Loads the controller	Colaborators <ul style="list-style-type: none">• FXMLController