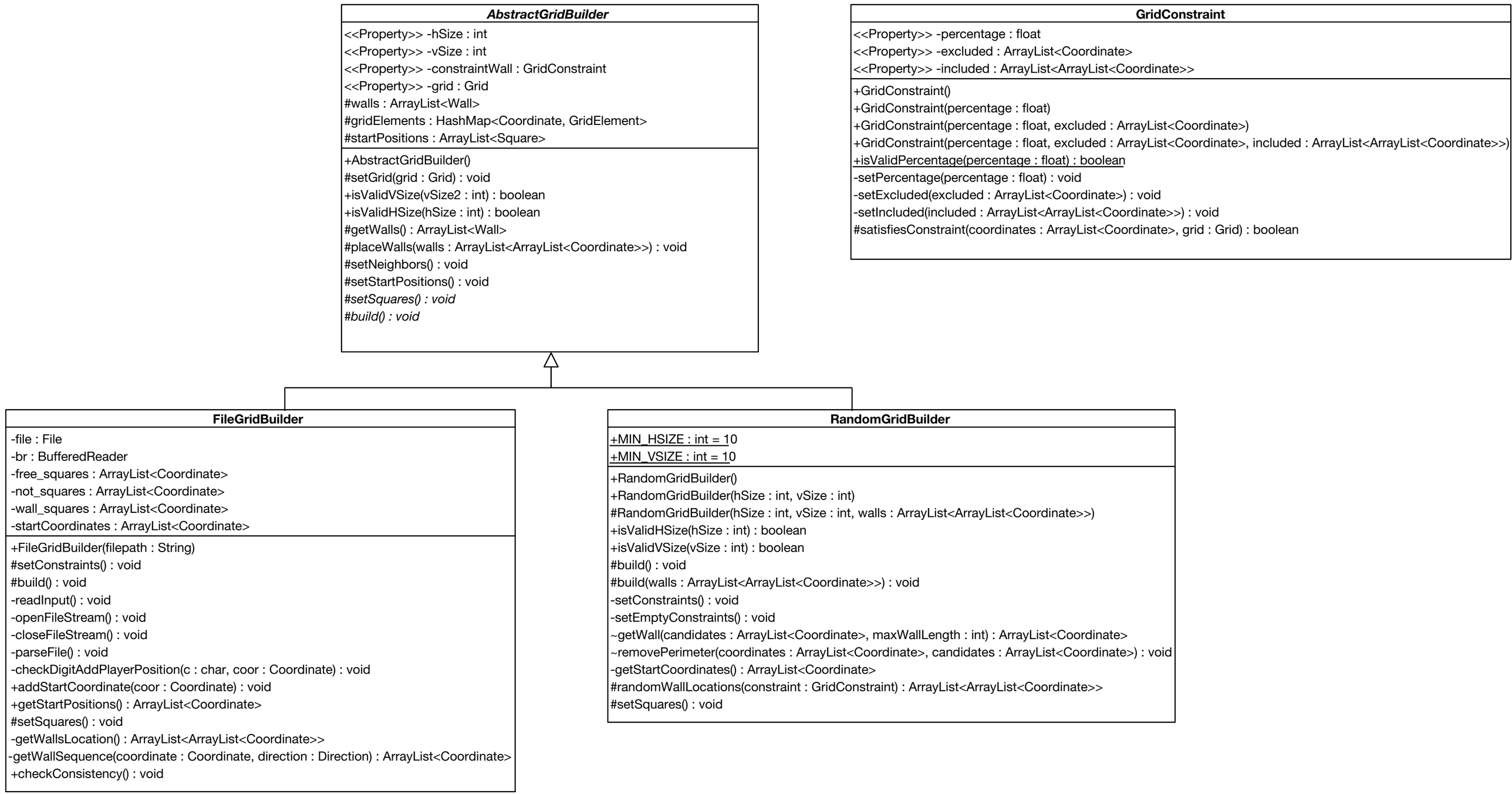
AbstractGridBuilder
<<Property>> -hSize : int
<<Property>> -vSize : int
<<Property>> -constraintWall : GridConstraint
<<Property>> -grid : Grid
#walls : ArrayList<Wall>
#gridElements : HashMap<Coordinate, GridElement>
#startPositions : ArrayList<Square>
+AbstractGridBuilder()
#setGrid(grid : Grid) : void
+isValidVSize(vSize2 : int) : boolean
+isValidHSize(hSize : int) : boolean
#getWalls() : ArrayList<Wall>
#placeWalls(walls : ArrayList<ArrayList<Coordinate>>) : void
#setNeighbors() : void
#setStartPositions() : void
#setSquares() : void
#build() : void
GridConstraint
<<Property>> -percentage : float
<<Property>> -excluded : ArrayList<Coordinate>
<<Property>> -included : ArrayList<ArrayList<Coordinate>>
+GridConstraint()
+GridConstraint(percentage : float)
+GridConstraint(percentage : float, excluded : ArrayList<Coordinate>)
+GridConstraint(percentage : float, excluded : ArrayList<Coordinate>, included : ArrayList<ArrayList<Coordinate>>)
+isValidPercentage(percentage : float) : boolean
-setPercentage(percentage : float) : void
-setExcluded(excluded : ArrayList<Coordinate>) : void
-setIncluded(included : ArrayList<ArrayList<Coordinate>>) : void
#satisfiesConstraint(coordinates : ArrayList<Coordinate>, grid : Grid) : boolean
FileGridBuilder
-file : File
-br : BufferedReader
-free_squares : ArrayList<Coordinate>
-not_squares : ArrayList<Coordinate>
-wall_squares : ArrayList<Coordinate>
-startCoordinates : ArrayList<Coordinate>
+FileGridBuilder(filepath : String)
#setConstraints() : void
#build() : void
-readInput() : void
-openFileStream() : void
-closeFileStream() : void
-parseFile() : void
-checkDigitAddPlayerPosition(c : char, coor : Coordinate) : void
+addStartCoordinate(coor : Coordinate) : void
+getStartPositions() : ArrayList<Coordinate>
#setSquares() : void
-getWallsLocation() : ArrayList<ArrayList<Coordinate>>
-getWallSequence(coordinate : Coordinate, direction : Direction) : ArrayList<Coordinate>
+checkConsistency() : void
RandomGridBuilder
+MIN_HSIZE : int = 10
+MIN_VSIZE : int = 10
+RandomGridBuilder()
+RandomGridBuilder(hSize : int, vSize : int)
#RandomGridBuilder(hSize : int, vSize : int, walls : ArrayList<ArrayList<Coordinate>>)
+isValidHSize(hSize : int) : boolean
+isValidVSize(vSize : int) : boolean
#build() : void
#build(walls : ArrayList<ArrayList<Coordinate>>) : void
-setConstraints() : void
-setEmptyConstraints() : void
~getWall(candidates : ArrayList<Coordinate>, maxWallLength : int) : ArrayList<Coordinate>
~removePerimeter(coordinates : ArrayList<Coordinate>, candidates : ArrayList<Coordinate>) : void
-getStartCoordinates() : ArrayList<Coordinate>
#randomWallLocations(constraint : GridConstraint) : ArrayList<ArrayList<Coordinate>>
#setSquares() : void