Crowd dynamics simulation- a multi-agent system based on CA

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Implemented improvements:

- Add repulsion force between pedestrians and walls (add it by modification of static floor field close to the walls).

Now, we are taking into consideration existing walls at our board when we calculate static field. When point is wall, it is not able to be added as neighbor. Furthermore calcStaticField method returns False when type of point is 1 (means it is wall).

- Random order of pedestrian's movement.

All the points which can move are added to new ArrayList PointsToMove. Every iteration we update this ArrayList and shuffle. Then for every point in list call point.move(). Thanks to this solution we introduce randomization in points' movement.

- Define more than one exit (source) of the static field, and implement the pedestrian decision process of choosing the exit.

Thanks to set staticField to 0 for each cell of type 2 (exit) and then calculate staticField for all points, each point with type 3 (pedestrian) 'knows' which exit is the closest and goes there.