

Exercise : Gem Puzzle

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The Game



Also called Game of 15, Boss Puzzle or Taquin (in french)

- Invented by Sam Loyd around 1870
- Rubick's cube ancestor



Objective: reorder numbers by sliding tiles on the empty tile

13	2	3	12
9	11	1	10
	6	4	14
15	8	7	5

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	

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Objective: reorder numbers by sliding tiles on the empty tile

Some configurations cannot be solved.

We only consider 8 tiles and one empty room




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	3	4	
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Implementation Details



Capture *swipe gesture*

-  And move the tiles consequently
-  Use GestureDetector
-  Implement GestureDetector.OnGestureListener



Two options for the GUI

-  Use TextView that will be updates according to user moves
-  Use containers and fragments for each tile
 -  **preferred option since it allows to implements animations for moving tiles**



Do not forget to shuffle randomly your tiles



Do not forget to detect the end of the Game

GUI



Initial state



- Yellow rectangles represent tiles to move
- Grey tile is the empty room
- A swipe move the **only** available tile for this move
- A Toast notify the user that its move has been detected



Summary

 An dialog displays when the user end the game

 With this simple game you can elaborate a valuable App

-  Temple Run
-  1024
-  CandyCrush
-  ...

