Android Application for Mind/Brain Puzzle Game

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ABSTRACT

This paper presents the overview of Mind/Brain Puzzle (MB Puzzle using picture dynamically. Now-a-days people have forgotten to play puzzles. They have long known that puzzles have many benefits for their children. Youngsters have lost interest in playing puzzles or other games. As today's generation and kids also addicted to smart phones I have created the MB Puzzle for them that they can play the puzzle game anytime and anywhere. Solving a puzzle is like solving a research problem. Both require the right cleverness to see the problem from the right angle, and then the careful execution of that idea until you find a solution. (The main difference is that the puzzle usually guarantees that the puzzle is solvable.)

Puzzles also lead to re-search problems which form a sort of puzzle: to analyze a family of puzzles and their solutions algorithmically. Solutions to these puzzles in turn influence puzzle design, often leading to interesting puzzles that can be appreciated without mathematics.

KEY WORDS: android, random shuffle, valid moves, JDK (key-words).

1. INTRODUCTION

In today's world everyone is using smart phones. As smart phones are reducing the work of memory, for youngsters and kids it is necessary to get some work for memory to sharpen it. The first jigsaw puzzle was created in Britain during the mid-1700s by John Spilsbury who used a map puzzle to teach world geography. During the 1900s, magazines and newspapers began entertaining the people with word puzzle. Over the last century, the use of puzzles has expanded and taken many different forms. So I have created the new game for all that all will enjoy. This puzzle game is simply cute and little tough to solve. It can help to increase concentration power. This is the puzzle which is opportunity for young children to focus on completing the game with pleasing image. This puzzle is that to make the whole image out of it. It contains the cut image slides which we have to swap in any direction. There is one blank slide we have to swap the image slide with that blank slide in order to make the whole image. You have to use the logic power, patience, facing difficulties in it. There are many benefits out of this kind of puzzle. When your child is alone with this puzzle you can expect at least some skills to be built. Some of them are cognitive skills, emotional skills, memory skills, etc. We will discuss these skills in details later in this paper.

Literature Reviews In every case, the puzzle-solver's goal is to solve a particular mentally challenging problem or accomplish a particular mentally challenging task. Computer games are today an important part of most children's leisure lives and increasingly an important part of our culture as a whole. Computer games are a growing part of our culture. The puzzle games have been too simplistic in comparison to competing video games. Logical thinking and problem solving. Most puzzle solving requires use of logical thinking and one's problem-solving skills. Solving puzzles often requires strategic and creative thinking. Especially with some mentoring help, students can transfer their increasing puzzle-based logic and problem solving to other situations.

Proposed System: Although there are innumerable kinds of puzzles, they all are not on smart phones. Beginning with hands-on puzzle as they like to use cell-phones it is very beneficial for them. Kids like cute simple games so this is the game made for them especially. They can enjoy playing this pink cute puzzle. This application based on random shuffling algorithm which is discuss this algorithm in details later in this paper.

Algorithm:
- ➢ Random Shuffle
- • Using this algorithm, the puzzle is as random as the Math. random() function can get. For those that are not familiar with (this type of) sliding puzzles, basically you have a number of tiles on a board equal to (n * m) - 1 (possibly more holes if you want).
- • The goal is to re-arrange the tiles in such a way that solves the puzzle. The puzzle could be anything, from number games to images.
- • As the puzzle is constructed using valid moves from solution there must be solution using those moves. Moreover you define the complexity of the puzzle by making more and more random moves.
- • Shuffling algorithms is a suitable and very effective way to implement for randomization of stored images. This algorithm checks for replication and repetition of the randomly generated. The nature of this algorithm is as followed, for a set of N (the total number of cut image in the tiles) elements for generating a random alteration of the images 1–N.

Working:
- • This puzzle is that to make the whole image out of the slides.

- There is option to select a image from your internal / external or camera and choose a image.
- It contains the cut image slides which we have to swap in any direction.
- There is one blank slide to swap the image slide with that blank slide in order to make the whole image.
- In the puzzle we can start game from beginning anytime by selecting new game option.
- And one can quit the game by selecting quit option.
- If one choose the quit option, after quit it will directly quit the game.
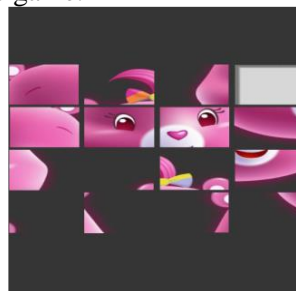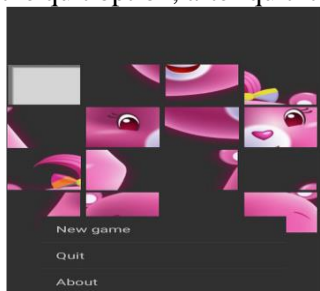
Figure.1. Main Screen with options to choose   **Figure.2. Screen after new game starts**

➢ **Technology used:**
- Windows Operating System
- Android Operating System
- Eclipse to develop App
- JDK
- XML for screens layout
- Java for programming

Advantages
a) Cognitive skills –As they solve the problems of a puzzle
b) Emotional skills-they learn patience
c) Memory- they can improve the thinking and memory will get sharp.
- Puzzles are not like sports that you must practice and slowly work through the puzzle before you reach the ending. Start your child out with the simplest but tough ones and scale up later.
- By playing puzzles the different regions of brain works together to achieve results it will improve the brain activity.
- Puzzles are known for their power which benefit includes a positive mood, better concentration, improved memory.
- While puzzles stimulate the brain, they also relax it and it reflects as boost self-confidence by all of its own.

Limitations
- Only single player can play this puzzle.
- Time consuming game
- Sound effect are not provided
- Levels are not present

Future Enhancement: In future we will add some other images slides in the game. This is the puzzle which is created keeping in mind that all the age groups will enjoy this puzzle. In future I will add some interesting things that adults will find more and more interest in this puzzle. The rapid growth of smart phones has lead to a renaissance for mobile services. Go anywhere applications support a wide array of social, financial, and enterprise services for any user. Application markets such as Apple's App Store and Google's Android Market provide point and click access to hundreds of thousands of paid and free applications.

2. CONCLUSION

Puzzles do many wondering things for the human brain. The age groups like children, youngsters, adults also will get benefit from this puzzle game by improved memory, logic, emotional skills. By playing this puzzle people can find that the whole family will enjoy this puzzle. In wondering and get confusing with the pieces of jigsaw puzzles it is the simple puzzle to play and not to confuse. As it is simple but it also a tough one to solve and result out of it.

3. ACKNOWLEDGEMENT

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