**15-112 TP 1**

**Project Proposal**

Make a recursive puzzle board where the top-level board is a Sudoku puzzle, where blank tiles are locked. On clicking a tile, the user is taken to another type of puzzle which they have to finish to unlock tile and fill in number. This makes Sudoku far more engaging for the younger generation which looks for a constantly evolving game. Plus, it’ll just be fun and challenging to work on something like this, whether as a developer or player. Also, there have been studies done to show that playing games can lead to development of cognitive abilities so I might choose to expand this further in that avenue post-Term Project time.

**Competitive Analysis**

*Note: I did not find a website online that had a similar puzzle to the kind I have envisioned so I will look at individual features which I would like in my puzzle.*

<http://www.addictinggames.com/puzzle-games/3-pandas-2-night-game.jsp>

Features:

1. I like the graphics or/and User Interface. It is interactive and fun. Cute characters. Nice buttons.
2. Instructions given as game is played.

Anti-Features:

1. Does not explain what each button does so people who don’t play games frequently (i.e, people like me), don’t know what exactly they mean.
2. The music could not be muted from the get-go which I dislike as it can be loud and disruptive if running in the background or otherwise as well.

<http://www.jigzone.com/gallery/A02501FC13.2B6F399>

Features:

1. Provides multiple options from which user can select which pattern to work on.
2. Easy to understand interface.
3. Drag and drop pieces. Pieces click together when it’s correct.
4. No sound.
5. Timer. Average and fastest separately given.

Anti-Features:

1. Jigsaw puzzles get pixelated with resizing.
2. Does not explain how to work with puzzle or use interface.
3. Allows cut to be changed, and shuffling of pieces.
4. Takes images from different places. That is, does not generate pictures itself.

<http://www.telegraphindia.com/games/sudoku/>

Features:

1. Simple interface with explanation given.
2. Allows user to play another game.
3. Reset, Redo and Undo allowed.
4. Highlights wrong entries in red.

Anti-Features:

1. The tiles don’t recurse on themselves and lead to another puzzle.

<http://thejigsawpuzzles.com/Puzzle-of-the-Day/Mandelbrot-Set-Fractal-jigsaw-puzzle>

Features:

1. Changing cut of the puzzle- allowing more and lesser rectangle pieces
2. Providing original picture along with jigsaw puzzle

Anti-Features:

1. The original picture needs to be expanded and then it becomes difficult to solve puzzle while looking at the original.

<http://www.jigsawplanet.com/?rc=play&pid=0fb14042e31e>

Feature:

1. Smooth edges of jigsaw puzzle (classifies as anti-feature as well).
2. Gives total time at end of puzzle
3. Gives list of best times along with usernames

Anti-Feature:

1. Smooth edges- unconventional, difficult to see where they click
2. Gives total number of pieces in the end

<http://www.knowledgeadventure.com/games/a-maze-race/>

Features:

1. Has time limit built in through red ball
2. Simple UI, straightforward game
3. Mute button!

Anti-Features:

1. Does not have pause feature for red ball
2. Does not have a reset feature either

<http://www.websudoku.com/>

Features:

1. On clicking “How am I doing?”, highlights the row/column/box where error is detected
2. Has different difficulty levels
3. Has ‘Evil’ difficulty mode
4. Hides board when game is paused

Anti-Features:

1. Starts from 9x9 board
2. Has hint and print features

<http://www.247sudoku.com/>

Features:

1. Nice UI
2. Provides instructions/objective of game

Anti-Features:

1. Drag and drop button kind of animation