LITS

Project 1, Group -4

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Introduction:

LITS is a logic puzzle with simple rules and challenging solutions. It's a grid-based puzzle, with grid divided into regions and user's task is to fill each region with one tetromino, abiding by certain rules of game.

Game components:

6x6 Grid: On the main screen of game is a 6x6 gird, which is divided into regions, with each region marked by its separate color.

Regions: These are the divisions of grid that consists of some grid cells. Typically, regions include 5-10 cells. All the cells in a region are connected to other cells in region and the region overall is connected to other regions.

Tetrominos: These are 4 letters "L, I, T, S" with each letter formed by 4 cells. Their specific figure is given below,
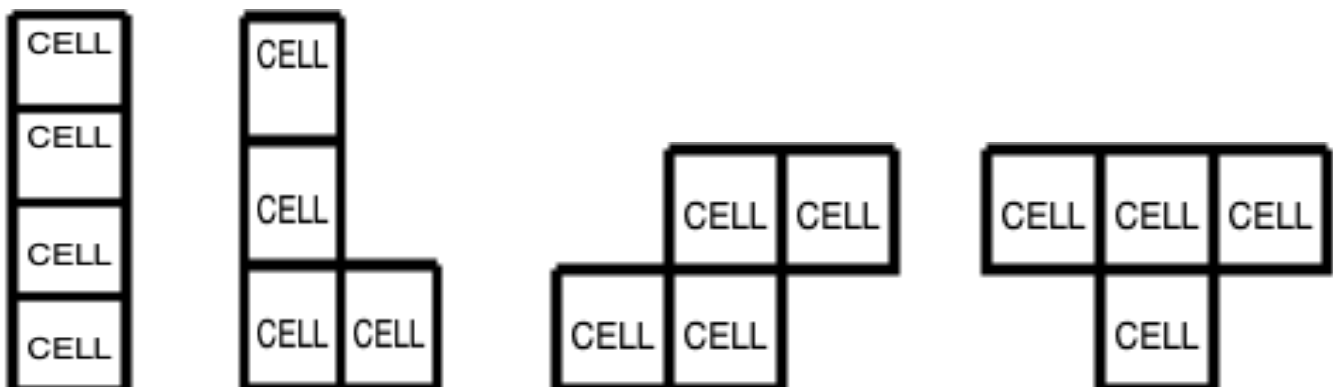
Game's Setup:

A menu prompting the user to start the game.
A rule state to introduce the user about the game rules.
A 6x6 grid, divided into 6 different regions. Each region has a particular color for its cells.
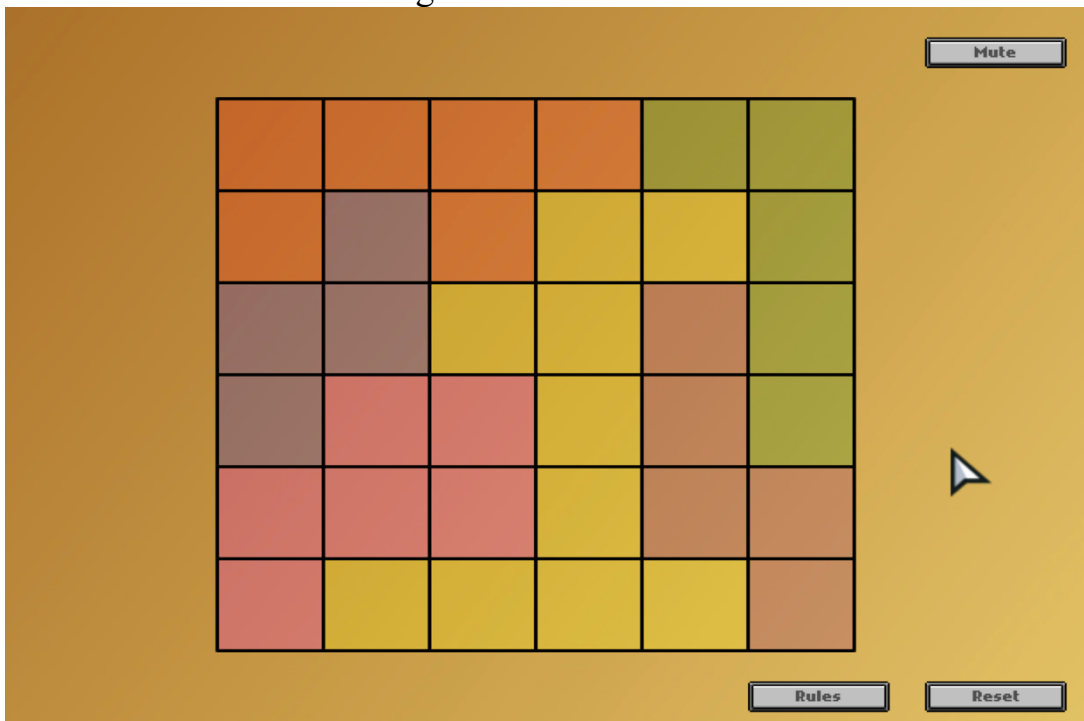When the cell is selected it gets tint.

Figure 1. Initial Grid without any user interaction.

Victory Conditions:

Each region of the grid should be having one tetromino to complete the region.
Shade exactly four connected cells in each outlined region to form an L, I, T, or S tetromino.
 The following conditions must be true:
       (a) All selected cells are connected with each other.
       (b) No 2x2 square can be formed anywhere on the grid.
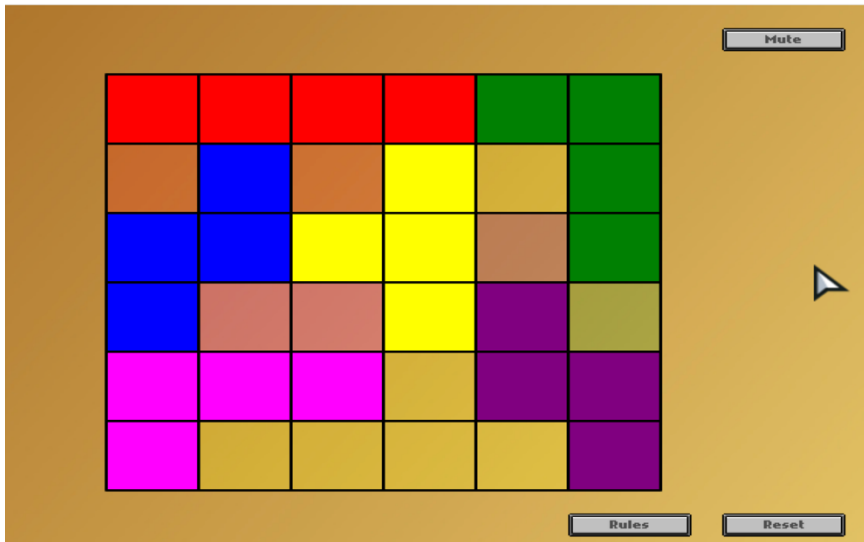   (c) No two shapes of the same type can touch.

Figure 2. A complete grid with all its regions completed.

Game's Sequence of Play

Game starts with a menu state that prompts user to hit play button and start the game. Menu state will take the user to the rules state where the user will be described with the game rules. Game rules are as per discussed in win conditions.
After the rules state user is prompted to actual game. Game starts with the non-interacted grid and the user is supposed to select the cells by clicking in them. By selecting the cells, user is supposed to complete the regions and get the grid completed as per game rules.

Game state also consists of the rules, reset and mute button. Rules button takes the user to rules page anytime. Reset button resets the grid to the non-interacted state, to restart the game. Mute button is specifically for the music added to the game.

Credits: https://www.puzzle-lits.com/

Note: To build and run the project follow either of the steps:

a) Command (IOS) / Control (Windows) + Shift + B
b) Open teminal/command promt and navigate to the project folder in teminal/command promt and use commands, "lime test HTML5" or "lime test windows" (for windows OS) or "lime test mac" (for IOS) or "lime test linux" (for Linux OS).