Tile-O Game – Problem Description (1)

The Tile-O application first allows a game designer to design a board game and

then allows players to play the game. Only one game can be played at a time and

it cannot be paused or saved. The objective of the game is to find a hidden tile on

the board. Two to four players take turns by moving their playing pieces along

connected tiles based on the roll of a die. Each playing piece has a different color.

A designer first defines the whole game including the layout of the game board.

The designer places the tiles on the board and connects them with connection

pieces. A tile can be connected to other tiles on its right side, left side, top side,

and bottom side. At the most one tile can be connected on each side. In addition,

the designer indicates the hidden tile, the starting positions of each player, as

well as the location of action tiles.

The designer also defines a deck of 32 action cards by choosing from the

following predefined choices: (i) roll the die for an extra turn, (ii) connect two

adjacent tiles with a connection piece from the pile of 32 spare connection

pieces, (iii) remove a connection piece from the board and place it in the pile of

spare connection pieces, (iv) move your playing piece to an arbitrary tile that is

not your current tile, and (v) lose your next turn

Players take turns, with Player 1 starting the game, followed by Player 2, Player 3

(if applicable), and Player 4 (if applicable). The player whose turn it is rolls the die

and them moves their playing piece along connected tiles. If the player lands on

any tile, the color of the tile changes from white to black to indicate that the tile

has been visited during the game. If the player lands on the hidden tile, the game

ends and the player wins the game. If the player lands on an action tile, the

player takes the first action card from the deck of action cards and follows the

instructions on the action card. In addition, the action tile turns into a regular tile

for a number of turns as specified by the game designer. Players do not know

whether a tile is an action tile until a player lands on it.

