Scramble Housing

By Marinus Bos, 31-10-2021

Synopsis

The shop window is one of a real-estate company, HJT Makelaars. I used the images that display the available real-estate and turned them into a puzzle where you have to reconstruct various real-estate related images by moving and rotating pieces.

(The storefront is in Wageningen, Gelderland around 54 Plantsoen. (This was supposed to be a placeholder, but I forgot to take a picture of one around Twente, and I wasn't near Twente in this weekend before it was dark out)

Usage and interaction

Drag: clicking and holding the left mouse button on a piece will select it and allow you to drag it around. Letting go of the left mouse button will drop the piece. If the mouse cursor is over another piece when you let go, the piece you held will take the place of the other piece and the other piece will go to the empty spot. If the mouse cursor is not over another piece when you let go, the held piece will go back to its resting position.

Rotate: clicking the right mouse button on a piece will rotate it 90 degrees clockwise. (Rotating is disabled in the first level)

When a level is complete, click the left mouse button to continue.

Architecture

The first tab reads input, controls the game object and includes nextLevel() which switches the levels by replacing the game object

The Game class handles input, contains the pieces and background, and checks if a level is complete. It can swap pieces and shuffles them at the beginning of the game.

The Piece class contains the data for each piece, moves/animates and draws them.

The classes DragTutorial and RotateTutorial show a cursor to indicate how the user should interact with the game.

The Background and WinScreen contain visual elements.