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Final Project

The provided Python code implements a basic version of the "Wandering in the Woods" game, aimed at K-2 students to introduce the concept of wandering in a grid-like environment. The game is visualized using the Pygame library, which provides tools for creating graphical applications in Python. Upon running the code, a window is opened displaying a grid-like environment where two colored circles, representing people, move randomly within the grid.

The `Person` class represents each individual in the game. Each person is randomly assigned a starting position within the grid and is capable of moving in any direction (up, down, left, right, or diagonally) within the confines of the grid. The `move` method of the `Person` class simulates the random movement by updating the person's position based on random choices of direction.

Within the main loop of the program, the positions of two people are continuously updated until they bump into each other. Once the positions of both people are the same, they are considered to have "met" each other. At this point, the positions of the people are reset to new random positions within the grid, and the process repeats. The game continues to run until the user closes the window.

This simulation serves as an introductory exercise for young students to understand the concept of random movement within a grid-like environment. It offers a visually engaging way for students to explore basic computational concepts such as randomness, coordinates, and simple algorithms. As students progress through the game, they gain a basic understanding of how objects move and interact within a simulated environment, laying the groundwork for more complex computational thinking in later stages of the game.