Coding for Good Badges - Digital Game Design 1
Maze Game Diagram & Coding Blocks

Game Objective: Daisies use coding blocks to learn how games are developed for Step One of the Digital Game Design badge. They'll practice by moving a character (doll, stuffed animal, etc.) through a 3D maze. Their goal is to navigate their character around the city as a firefighter to reach a kitten that needs to be rescued.

Instructions: Before the meeting, set up a 3D maze game:

1. Draw the commands on the whiteboard or chart paper.

2. Print and cut out the obstacle coding blocks (buildings) and goal coding block (kitten).

3. Create a grid (5x5 or larger) on the floor using blank sheets of paper (8.5" x 11"). Alternatively, create the grid using masking tape - make sure the boxes are big enough for the character (doll, stuffed animal, etc.) to sit in.

4. Place the obstacle coding blocks (buildings), the character (doll, stuffed animal, etc.), and the goal coding block (kitten) in the grid according to the sample below.

If you're working with a large number of girls, you may want to work in small groups of no more than 6. Each group will need their own 3D maze game grid. It's highly recommended for each group to be led by an adult Volunteer.
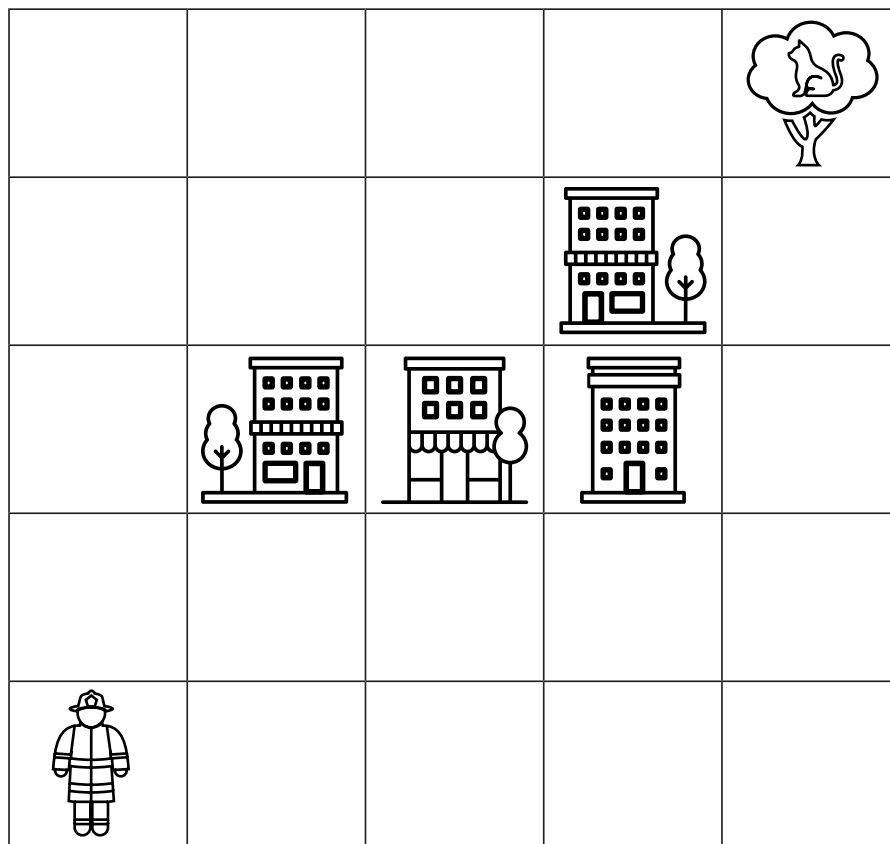
Commands:

⇨ **Turn Right:** Turn to the right, do not take a step, stay in your square.

⇦ **Turn Left:** Turn to the left, do not take a step, stay in your square.

↪ **Jump:** Jump over an obstacle and land in the next square. Jumping is not allowed if it takes you off the grid.

⇧ **Move Forward:** Take one step forward. Characters cannot step off the grid.

Sample Grid Solution

(There are many ways Daisies could solve!):

Move Forward
Move Forward
Move Forward
Turn Right
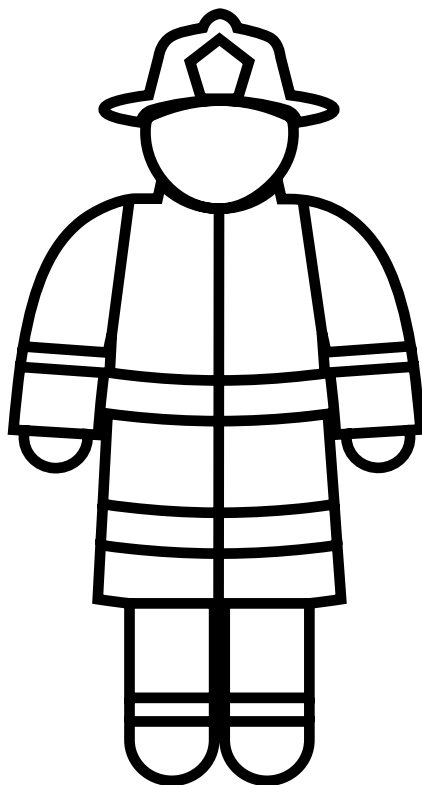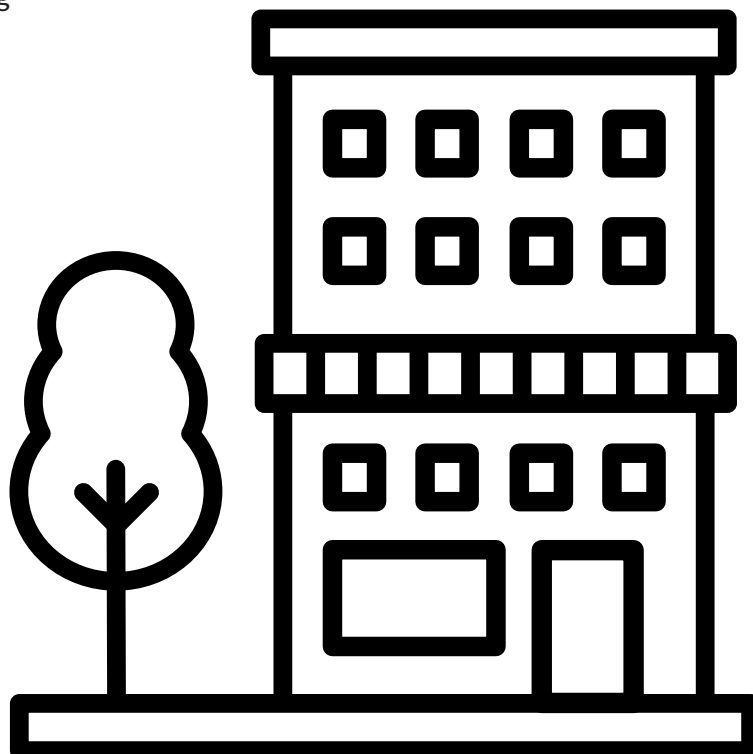**Move Forward**
Move Forward
Jump
Turn Left
Move Forward

Note: To increase difficulty, expand the grid to 6x6 or larger to create a larger canvas for game design!
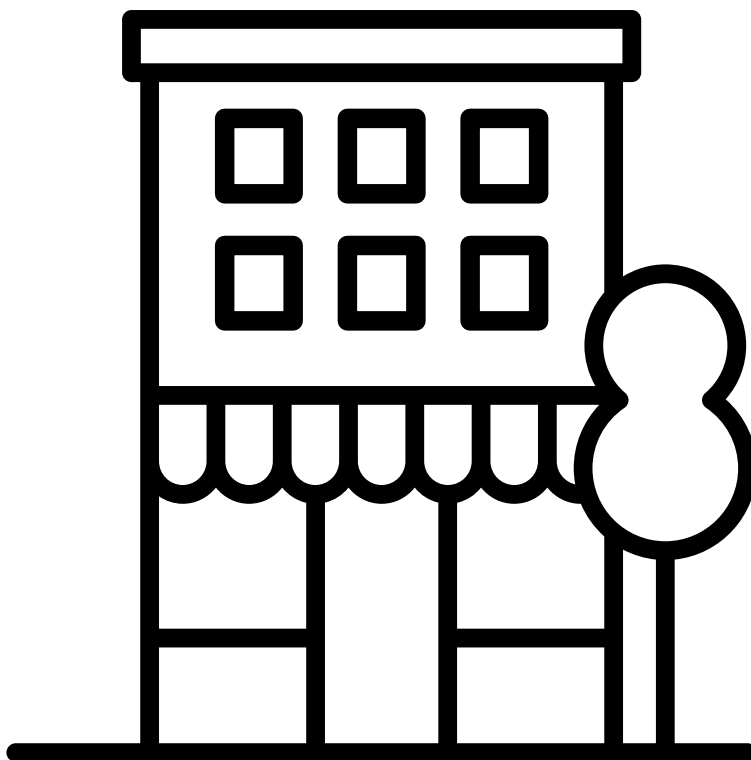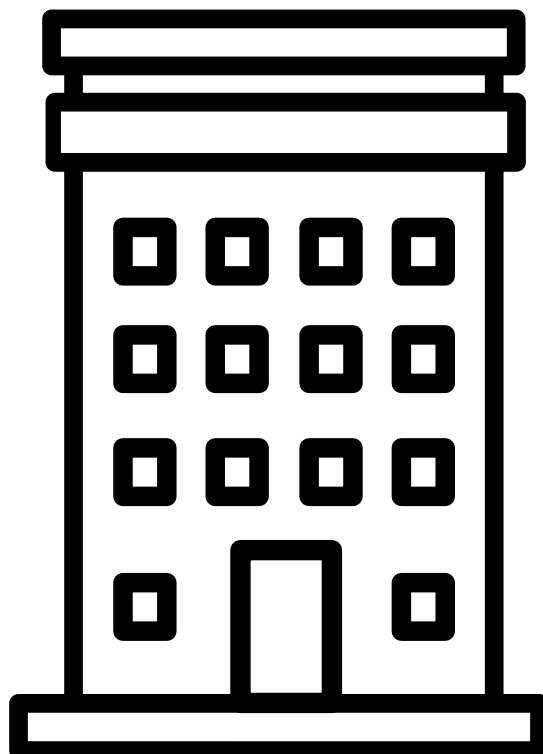
Character: Firefighter

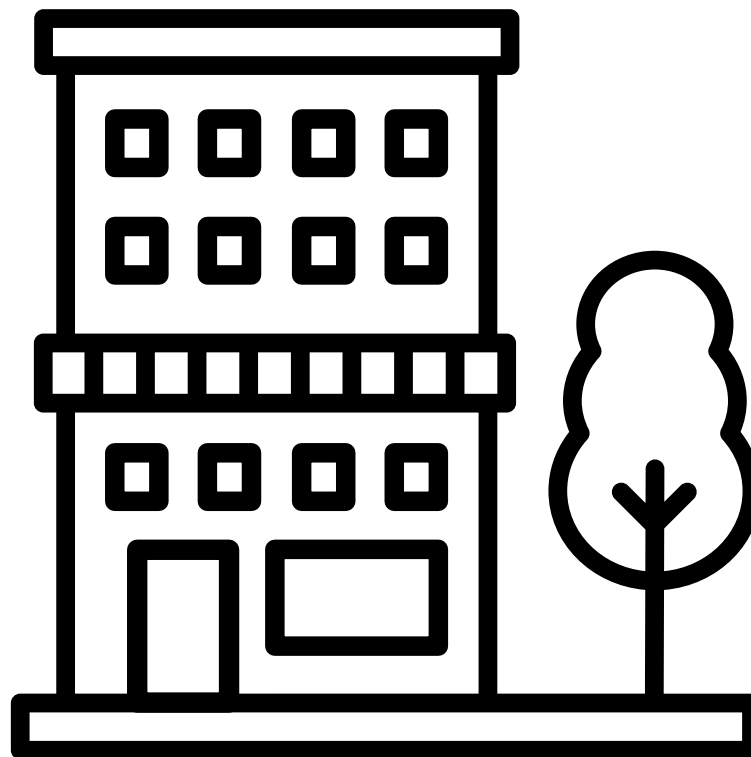**Obstacle:** Building

Obstacle: Building

Obstacle: Building

Obstacle: Building

Goal: Kitten