Karel Project #18

Minimal Maze

"A designer knows they have achieved perfection not when there is nothing left to add, but when there is nothing left to take away." -Antoine de Saint Exupery

Before You Start

Go to the Creative Suite, open a new Karel project, and save it in the folder course-karel-projects/ as minimal-maze.

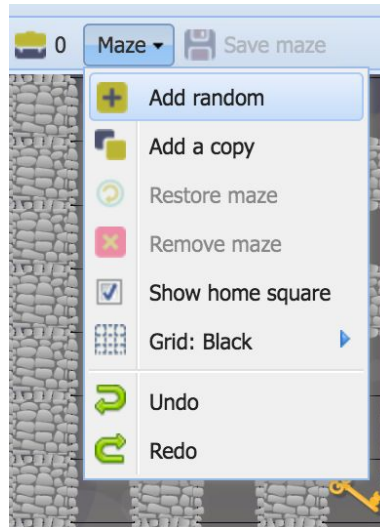### Goal: Refine a Randomized Maze

To create an elegant maze, you will:
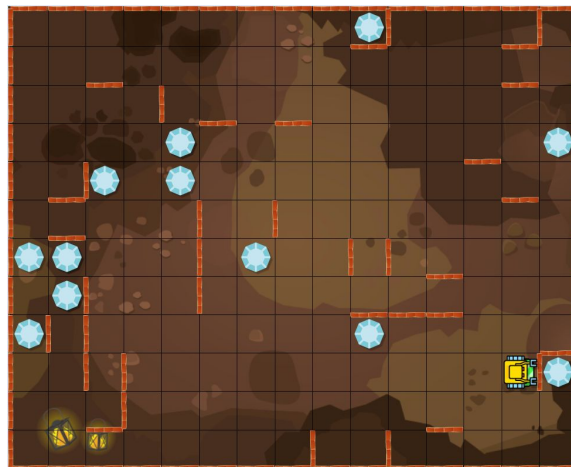
1. Generate a random maze.
2. Find patterns by using the Eraser tool.
3. Test and revise your maze.

Step 1: Generate a Random Maze

In the Designer Mode, select the Maze tab and click Add random.

This will create a maze with randomly generated Objects and Obstacles.

Whoa! That's a messy maze. However, there are some patterns we can work with. In the next step, you will refine your random maze to make it more fun to play.

Step 2: Find Patterns by Using the Eraser Tool

How you choose to refine your random maze is completely up to you. However, we should apply some of the design principles we have developed in other projects.

As an example, let's add a clear goal and some symmetry to the previously shown random maze.

That's already feeling a bit different. It is now easier to see the goal because Karel is facing the Home Square. Next, let's see if the walls can be used to draw the player's interest.

There, that's looking much better. From this point, there are many choices. What if the maze had different Goals? Collect all objects or Fill all containers would change the maze, and they would allow for different design methods.

Step 3: Test and Revise Your Maze

To review, you need to generate a random maze and refine your maze according to design goals. Your new maze can be simple or complicated but it will be a lot of fun to make.

Project Checklist

Your Project will be finished when:

1. You have saved the project in the folder course-karel-projects/.
2. You generated a random maze.
3. You have defined Goals for your maze.
4. You have refined your random maze.