Karel Project #7

DETECTIVE

Add Objects and Containers to your maze to create interesting programming challenges.

Select Creative Suite, open Programming, and launch a new Karel project. Click on File and save the worksheet in the folder course-karel-projects under the new name, detective.
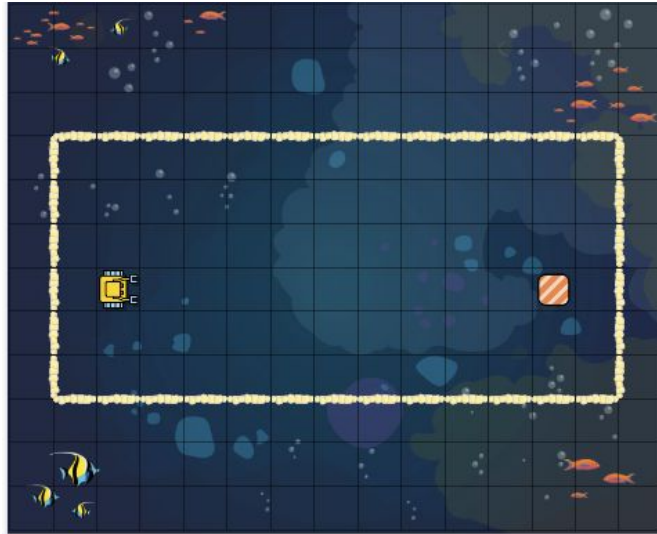
Click on ⊘ Designer and select ✎ to remove the example maze.

Goal: Create a Game with Objects and Containers

To use Objects and Containers, you will:

1. Create a maze from a template.
2. Add Objects and Containers.
3. Add relevant Goals to your maze.
4. Test your maze.

Step 1: Create a Maze From a Template

Have you built the template from Project #4? This Project will start with the same template. You can save time by starting your projects with simple templates.
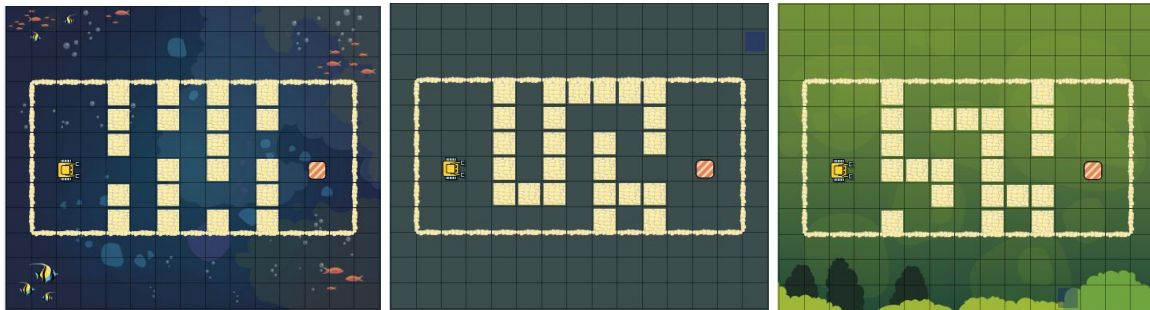
In Project #4, the template was named 4-columns.

Do you have:
- FOUR columns of Walls?
- Karel on the left?
- Home Square on the right?

You might have guessed that next step. You need to clear a path for Karel that ends at the Home Square.

Step 2: Add Objects and Containers

Use the Designer to add Objects and Containers to your maze.

Step 3: Add Relevant Goals To Your Maze

To finish, you need to add a Goal that works well with Objects and Containers.

Select Fill all containers. This will require players to put Objects into the Containers in your maze.

Next, set the Mode to Programming. This will require players of your maze to use the Karel Programming Language to solve your maze.

Finally, set a number of maximum lines for your maze in order to encourage players to use conditions. This will make more sense when you test your maze.

Step 4: Test Your Maze

Test your maze by selecting [Play] at the top of the Designer. For an added challenge, try making a different maze and compare it with your first maze. Compare different designs to become a better designer.

Project Checklist

Your Project will be finished when:

1. Your maze has Objects and Containers.
2. Your maze has relevant Goals.
3. Your maze is solvable.