

# Karel Project #1

## MAKE A MAZE

Want to **make a game**? The **Designer** lets you make **mazes** that are **fun and challenging**.

### Goal: Create Your First Maze

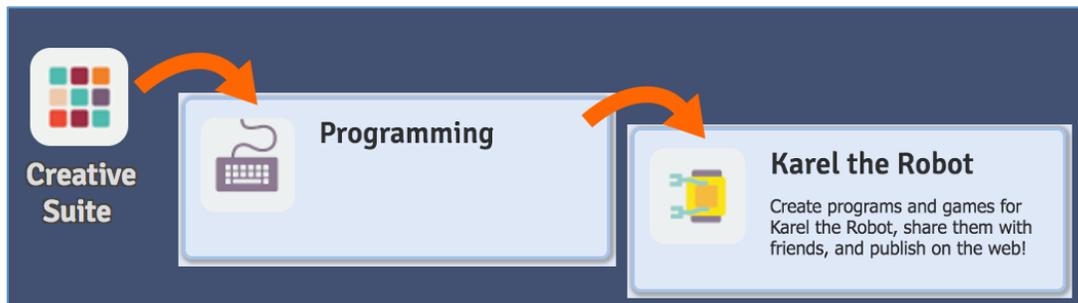
To **create your first maze**, you will:

1. Become familiar with the Karel **Designer**.
2. **Save** the project in the folder **course-karel-projects/**.
3. **Redesign** the tunnels in the **maze**.
4. **Test** your new maze to make sure it can be **solved**.
5. **Publish** your project on the web.

# Step 1: Become Familiar with the Karel Designer

To use the Karel Designer:

1. Double-click the **Creative Suite** icon on your NCLab Desktop,
2. Select Programming,
3. Open Karel the Robot.

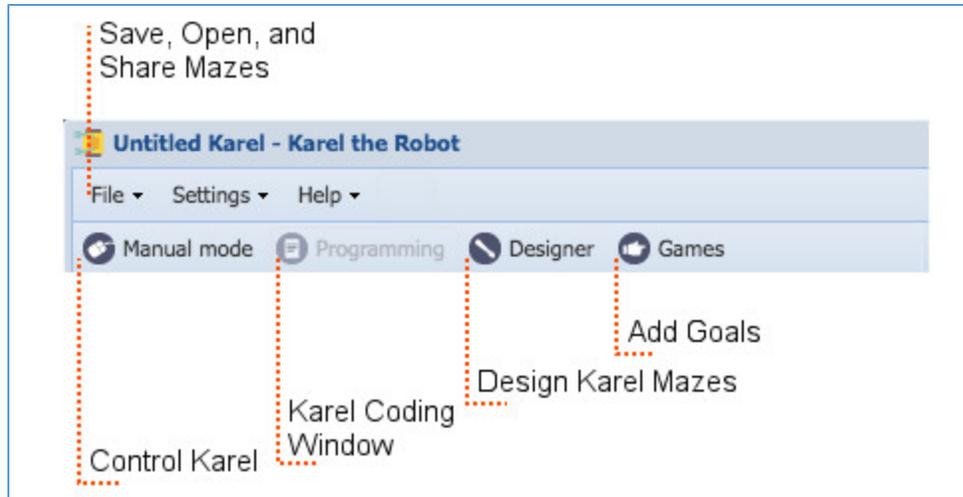


The app opens in **Programming Mode**:



**Programming Mode** is used to control **Karel** with code.

To use the other **Modes**, you can select the buttons at the top of the screen:



For this project, you will use the **File menu** to **create a file** for our project, then you will use the **Designer** to **edit your maze**. You will finally **test your maze** before publishing it on the **web**.

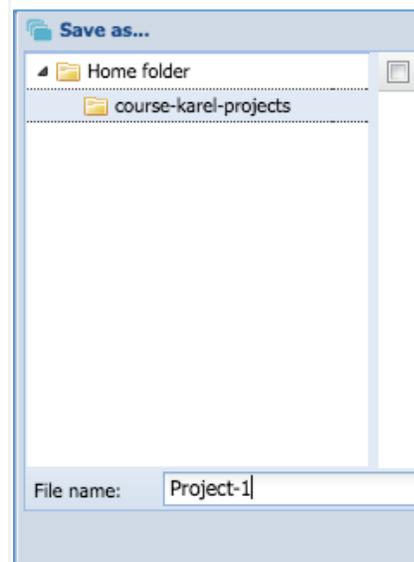
## Step 2: Save the Project

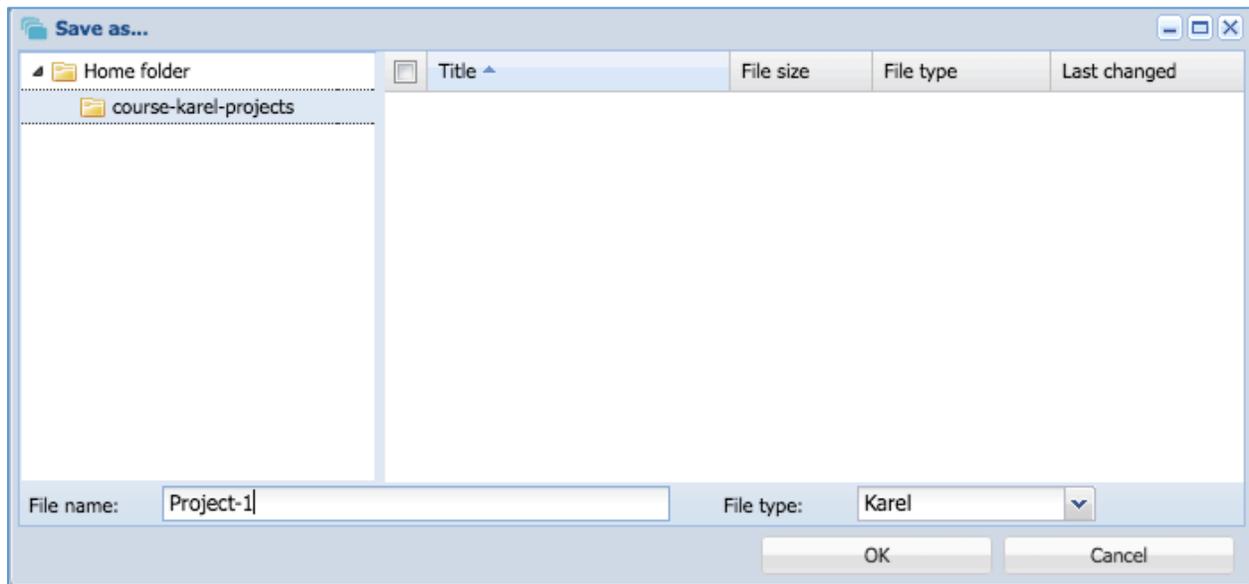
Before you start designing your maze, you need to go to the **File menu** and save the maze.

1. Select the **File menu**, then click **Save in NCLab** to save your file.



2. Select **/course-karel-projects** in the left panel.





*You can also create new folders by right-clicking the left panel.*

In the space next to **File name**, type **my-first-maze**. Press **OK** to create the file.

From this moment on your file will be **autosaved**, so you don't have to worry about losing your **maze**.

## Step 3: Redesign the Tunnels in the **Maze**

Begin making your new **maze** by selecting **Designer**.

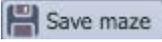


The **Designer** contains a variety of **Objects**. To edit your **maze**:

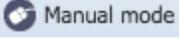
- Click on an **Object**, then select squares on the right,
- Use the  button to remove **Obstacles** and **Objects**.



*There are many possible mazes. Be sure to create **your own!***

Any time you make changes to the **maze**, the  button will start **flashing**. By pressing this button, you can **save your maze**.

## Step 4: **Test Your New Maze**

Once you are satisfied with your maze, it is time to **test your maze** to make sure it can be **solved**. Select .



Using **Manual Mode**, move **Karel** through the maze and enter the **Home Square**. If **Karel** can reach the **Home Square** your **maze** is complete!

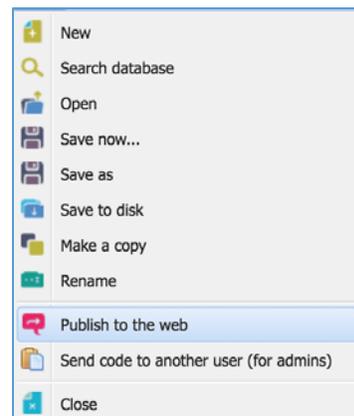
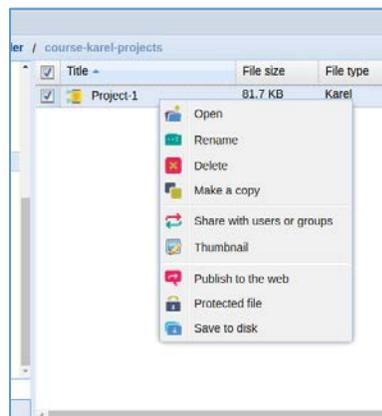
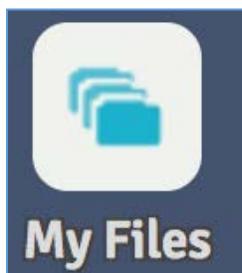


An **unsolvable** maze won't allow **Karel** to reach the **Home Square**.

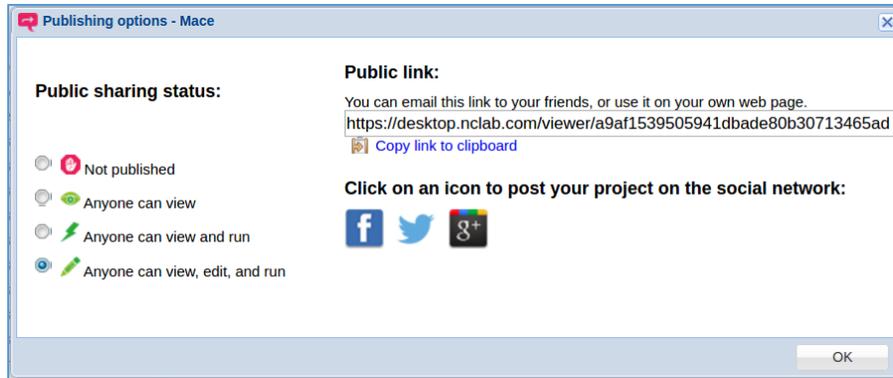
When finished, click on  and the **maze** will return to its **last saved state**.

## Step 5: **Publish** Your Project

1. Double-click **My Files** on the NCLab Desktop.
2. Locate your file, and **right-click** on it.
3. Click on **Publish to the web**.



You can now select how you want your file to be **published**.



-  Not published : Only you can see your maze.
-  Anyone can view : Your maze can be seen, but it can not be played.
-  Anyone can view and run : Your maze can be seen, but now it can be played.
-  Anyone can view, edit, and run : Your maze can be seen, played, and modified.

The last option is the **most popular one** because it allows other users to create a **copy** of your **maze**. This option lets you **inspire others!**



## Project Checklist

Your project will be finished when:

1. Your file **my-first-maze** has been saved in the folder **course-karel-projects/**.
2. The maze has been **changed** and the new maze has been **saved**.
3. Karel can **enter** the **home square**.
4. Your maze has been **published** to the **web**.