# CODING VIRTUAL ROBOTS

**Topic:** Programming

**Short Description:** In this lesson, you will learn to navigate and program virtual robots. Your initial goal will be to modify and operate the Robotic Arm to complete the specified goals.

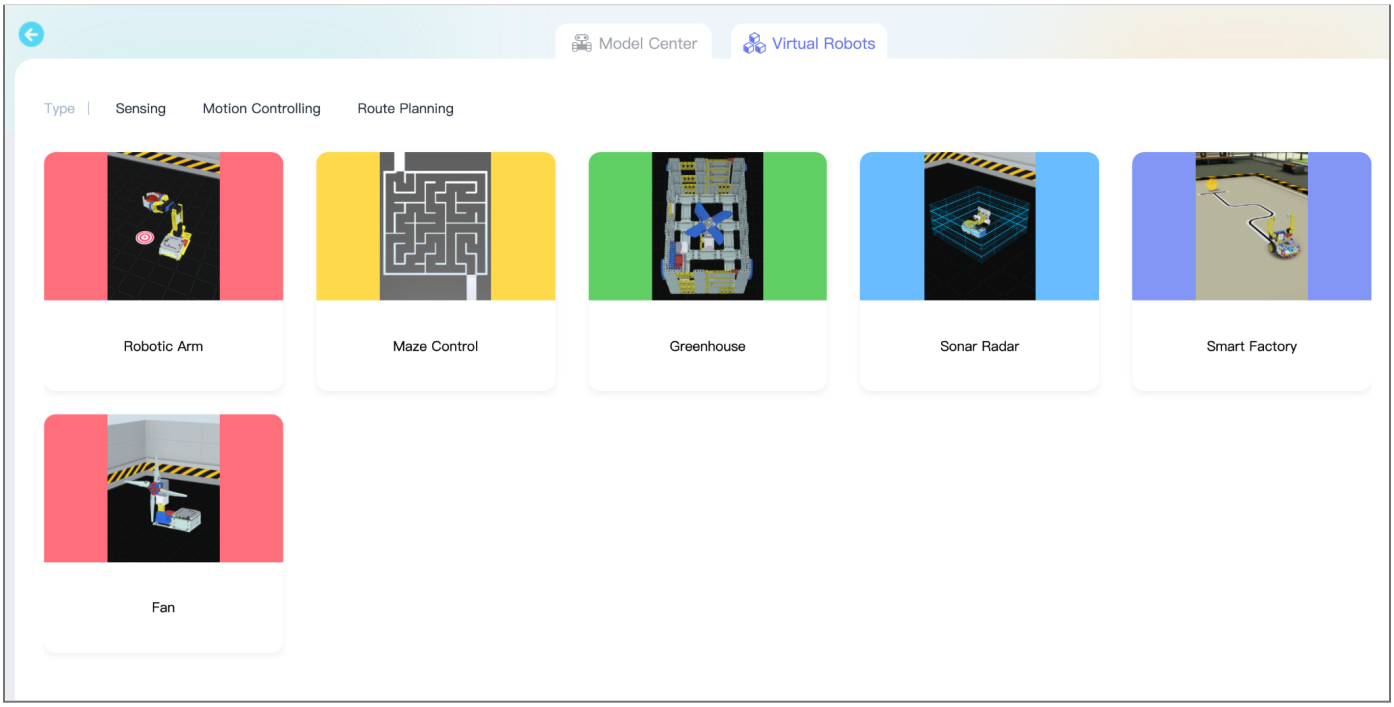
**Steps:**

1. Open uCode in a web browser. Google Chrome is preferred. There are two ways to navigate to the virtual robots.

    a. Click the **Resource Center** tab found at the top left of the screen. Select UKIT Advanced. This will take you to the model center landing page to access 3D build instructions and virtual robots.

    b. Select **3D** on the top right of the screen. This will launch the Fan virtual robot. To enter the model center from here, click **Resource Center** on the lower-right side of the screen.

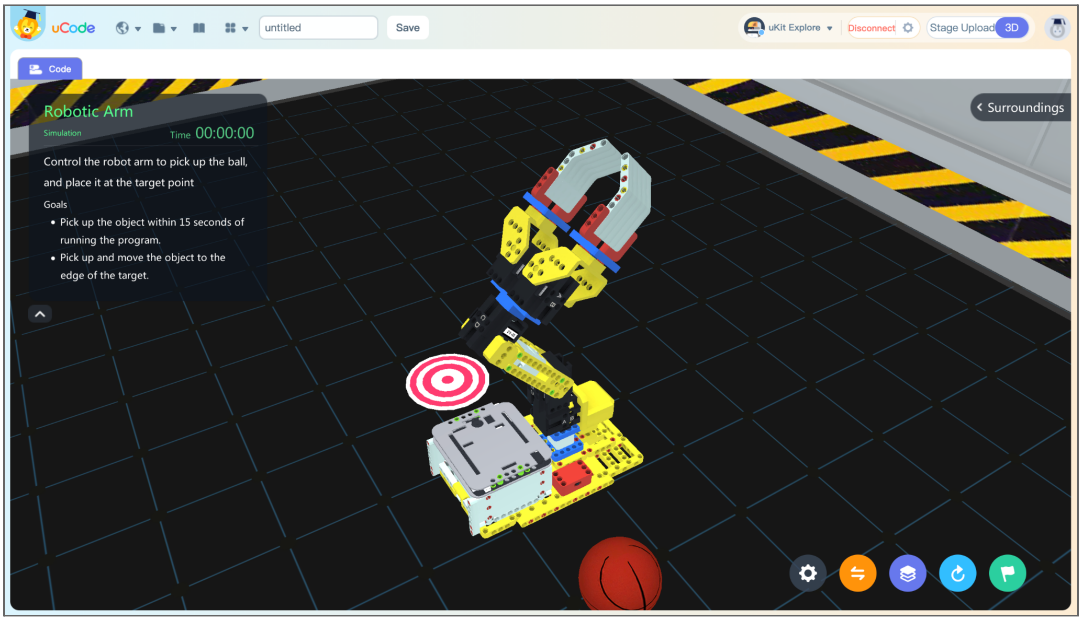
2. Within the **Virtual Robots** tab, you will find six 3D environments. Each of these environments are 3D re-creations of UKIT robots. For this initial lesson, select the **Robotic Arm**.



3. In the Robotic Arm environment, the first thing you'll see is a pre-populated code. All virtual robots have a code to start from. All codes will get you interacting with the robots but are only starting points and do not leverage all of the components of the robots. First, review the code and then click the **green flag** button to run.

4. To minimize the coding blocks and interact with robots in full screen, click the **orange view** button to switch views.

   Expand the simulation window to the left to view the goals of each virtual robot. See how you can modify the code to complete the goals. As they are completed, they will turn green.



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