## Practice Platform Guidelines

Download either the "practice school" folder or the "practice uni" folder from the links provided.

## If you are starting fresh

- You can straight away open up the world file by clicking on the Open World button ().
- Within the browsing window, navigate into the downloaded folder ("practice\_school" or "practice\_uni"), go into the "worlds" folder and open "10by10City.wbt".
- Next, compile each of the scripts: "junction\_emitter", "pedestrian" and "sanitizer" by clicking the gear wheel on the text editor.
- If the text editor isn't open by default, go to Tools -> and select Text Editor.
- If any of the 3 scripts aren't open (say the "pedestrian.c" script for example), click the "open an existing text file" button ( ) -> controllers -> pedestrian -> "pedestrian.c". Now you may compile the scripts as mentioned before.
- You can now start building your robot.

## If you have already made some progress with your robot

- You can add the robot onto the practice platform and continue working on it.
- To do this, navigate into the project folder of the project containing your robot.
- Go into the "worlds" folder and open up the ".wbt" file with a text editor.
- Copy the part of the file that is regarding your robot. That is, copy everything that's within "Robot {}". For example (the highlighted text should be copied):

```
#VRML SIM R2020a utf8
   WorldInfo {
     basicTimeStep 16
   Viewpoint {
     orientation -0.0007655765573138088 0.7048937232454413 0.7093125212638743 3.1400665477063407
     position -0.19602901409738163 11.065712086160055 0.09415350961321425
8
     followType "None"
9 1
10 TexturedBackground {
11
12 TexturedBackgroundLight {
   Robot {
14
     translation -1.11 0 -1.02
16
    children [
      DistanceSensor {
17
         rotation 0 1 0 -2.094395307179586
18
         name "dist 1"
19
         lookupTable [
           0 0 0
           0.2 1000 0
         ]
24
    ]
25
```

- Now, navigate into the downloaded practice folder and go into the "worlds" folder.
- Open up the "10by10City.wbt" file with a text editor and paste the copied text on the last line of this file. Save the file.

- Next, copy all the folders that are inside the "controllers" folder in your previous project folder and paste them inside the "controllers" folder in your new project folder (the downloaded practice folder).
- Now, open the world file from within Webots, compile the 3 scripts as mentioned in the previous section and then continue working on your robot.

## **IMPORTANT**

The sanitizers on the platform are programmed to disappear if your robot (or any other object) comes very close to it. It can only be brought back by the "Reload World" button () next to the simulation time. Pressing the "Reset Simulation" button () only resets the positions of the objects but doesn't restore removed objects. DO NOT save after a sanitizer disappears because then it will be permanently removed. If you accidently save, you can get it back by either repeating the second section above or by the following method (easier):

- 1. Locate "DEF SANITIZER 1 Robot" on the scene tree.
- 2. Expand its components.
- 3. Under "children", you can find "DEF SANITIZER\_1 Solid". Click on it and copy (Ctrl + C).



- 4. Now, locate the Sanitizer node which got removed. This should be still on the scene tree, but it would not have a Solid object under its children attribute (unlike the other sanitizers).
- 5. Click on the "children" atribute and paste (Ctrl + V).
- 6. Click on the newly pasted Solid ("DEF SANITIZER\_1 Solid").
- 7. Go to the Node tab in the Selected view and change the "DEF" from "SANITIZER\_1" to the name of the removed sanitizer (Eg: SANITIZER\_0 if the remove object is from "DEF SANITIZER\_0 Robot").

