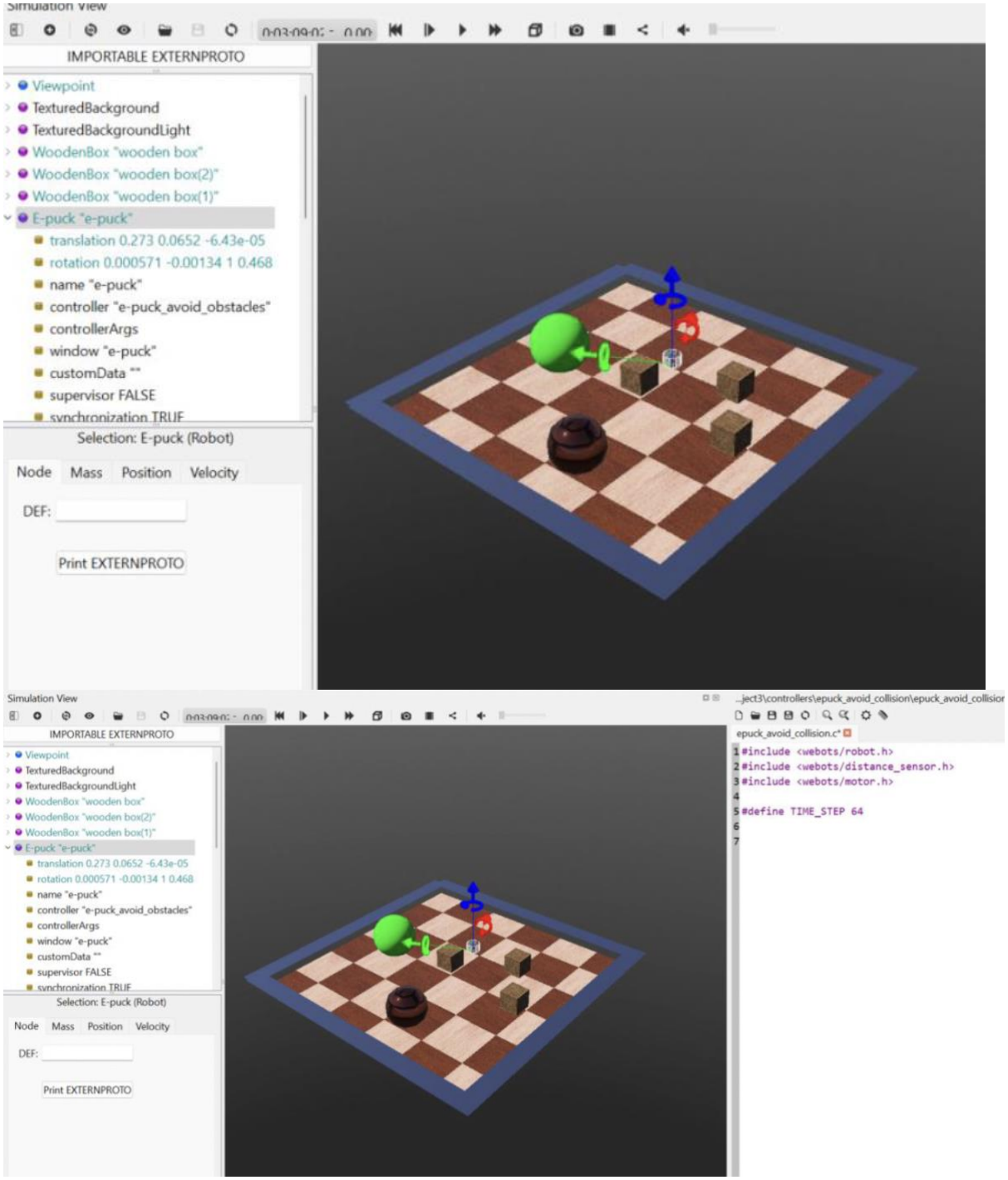
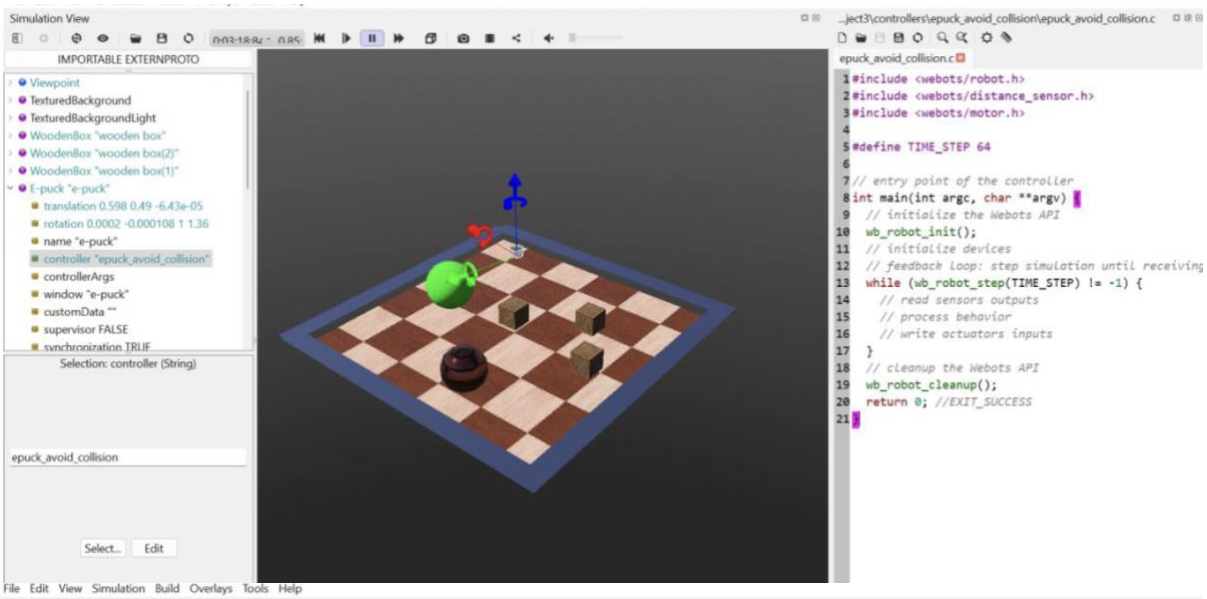
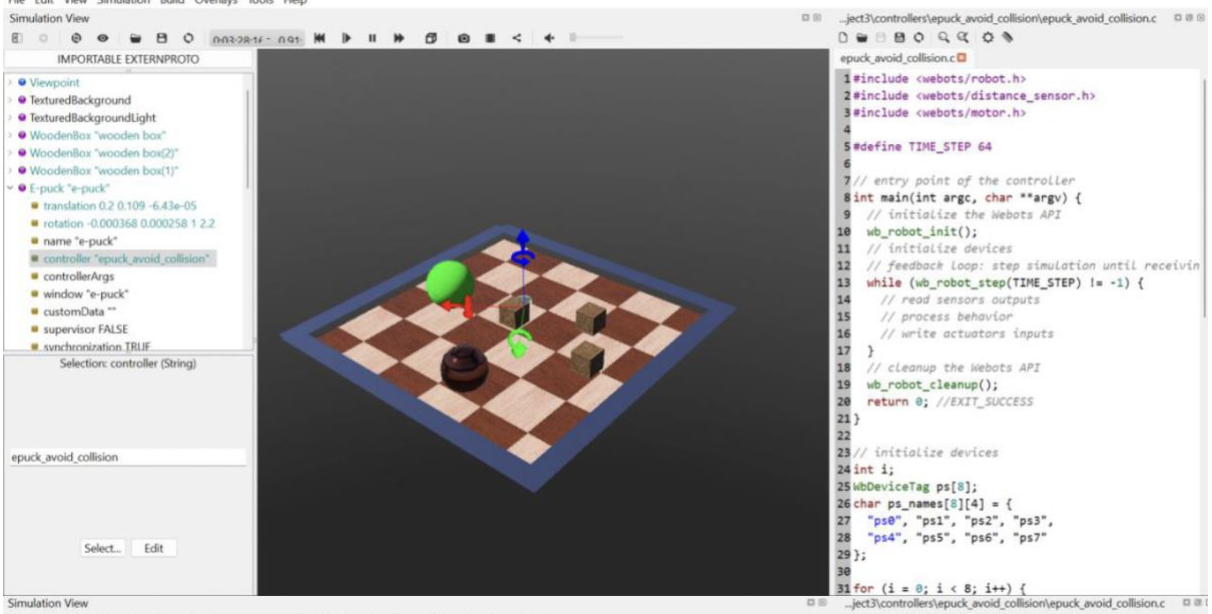
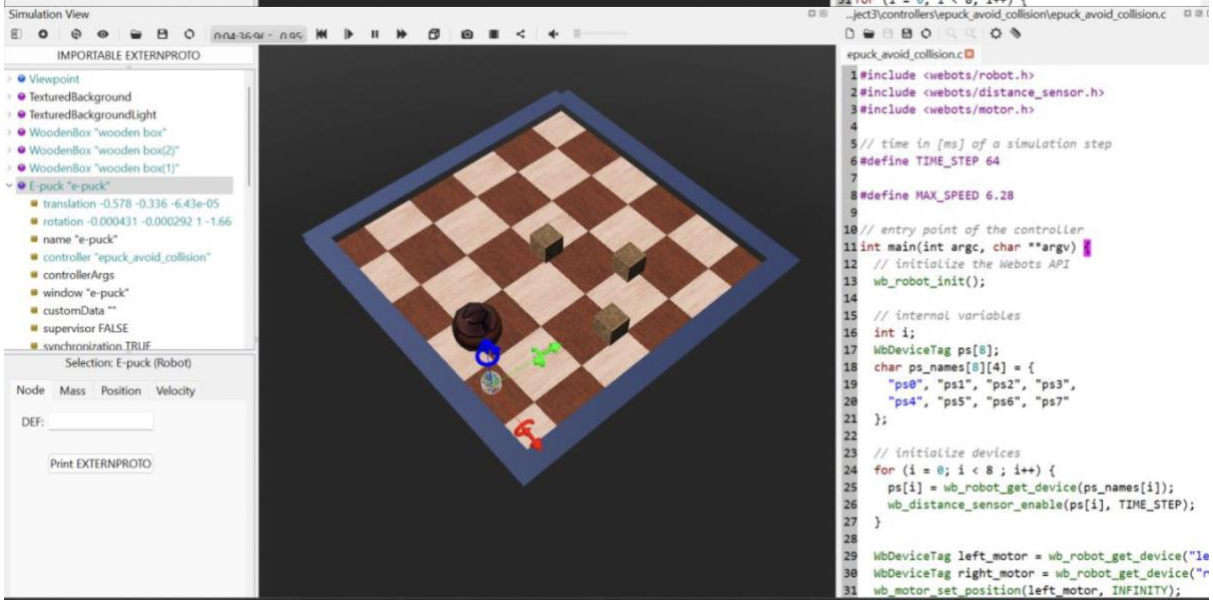

Simulation View
IMPORTABLE EXTERNPROTO
Viewpoint
TexturedBackground
TexturedBackgroundLight
WoodenBox "wooden box"
WoodenBox "wooden box(2)"
WoodenBox "wooden box(1)"
E-puck "e-puck"
translation 0.273 0.0652 -6.43e-05
rotation 0.000571 -0.00134 1 0.468
name "e-puck"
controller "e-puck_avoid_obstacles"
controllerArgs
window "e-puck"
customData ""
supervisor FALSE
synchronization TRUE
Selection: E-puck (Robot)
Node
Mass
Position
Velocity
DEF:
Print EXTERNPROTO

Simulation View
IMPORTABLE EXTERNPROTO
Viewpoint
TexturedBackground
TexturedBackgroundLight
WoodenBox "wooden box"
WoodenBox "wooden box(2)"
WoodenBox "wooden box(1)"
E-puck "e-puck"
translation 0.273 0.0652 -6.43e-05
rotation 0.000571 -0.00134 1 0.468
name "e-puck"
controller "e-puck_avoid_obstacles"
controllerArgs
window "e-puck"
customData ""
supervisor FALSE
synchronization TRUE
Selection: E-puck (Robot)
Node
Mass
Position
Velocity
DEF:
Print EXTERNPROTO
...ject3\controllers\epuck_avoid_collision\epuck_avoid_collisior
epuck_avoid_collision.c*
1 #include <webots/robot.h>
2 #include <webots/distance_sensor.h>
3 #include <webots/motor.h>
4
5 #define TIME_STEP 64
6
7


Simulation View
IMPORTABLE EXTERNPROTO
Viewpoint
TexturedBackground
TexturedBackgroundLight
WoodenBox "wooden box"
WoodenBox "wooden box(2)"
WoodenBox "wooden box(1)"
E-puck "e-puck"
translation 0.598 0.49 -6.43e-05
rotation 0.0002 -0.000108 1 1.36
name "e-puck"
controller "epuck_avoid_collision"
controllerArgs
window "e-puck"
customData ""
supervisor FALSE
synchronization TRUE
Selection: controller (String)
epuck_avoid_collision
Select...
Edit
...ject3\controllers\epuck_avoid_collision\epuck_avoid_collision.c
epuck_avoid_collision.c
#include <webots/robot.h>
#include <webots/distance_sensor.h>
#include <webots/motor.h>
#define TIME_STEP 64
// entry point of the controller
int main(int argc, char **argv) {
// initialize the Webots API
wb_robot_init();
// initialize devices
// feedback loop: step simulation until receiving
while (wb_robot_step(TIME_STEP) != -1) {
// read sensors outputs
// process behavior
// write actuators inputs
}
// cleanup the Webots API
wb_robot_cleanup();
return 0; //EXIT_SUCCESS
}


File Edit View Simulation Build Overlays Tools Help
Simulation View
IMPORTABLE EXTERNPROTO
Viewpoint
TexturedBackground
TexturedBackgroundLight
WoodenBox "wooden box"
WoodenBox "wooden box(2)"
WoodenBox "wooden box(1)"
E-puck "e-puck"
translation 0.2 0.109 -6.43e-05
rotation -0.000368 0.000258 1 2.2
name "e-puck"
controller "epuck_avoid_collision"
controllerArgs
window "e-puck"
customData ""
supervisor FALSE
synchronization TRUE
Selection: controller (String)
epuck_avoid_collision
Select...
Edit
...ject3\controllers\epuck_avoid_collision\epuck_avoid_collision.c
epuck_avoid_collision.c
#include <webots/robot.h>
#include <webots/distance_sensor.h>
#include <webots/motor.h>
#define TIME_STEP 64
// entry point of the controller
int main(int argc, char **argv) {
// initialize the Webots API
wb_robot_init();
// initialize devices
// feedback loop: step simulation until receivin
while (wb_robot_step(TIME_STEP) != -1) {
// read sensors outputs
// process behavior
// write actuators inputs
}
// cleanup the Webots API
wb_robot_cleanup();
return 0; //EXIT_SUCCESS
}
// initialize devices
int i;
WbDeviceTag ps[8];
char ps_names[8][4] = {
"ps0", "ps1", "ps2", "ps3",
"ps4", "ps5", "ps6", "ps7"
};
for (i = 0; i < 8; i++) {


Simulation View
IMPORTABLE EXTERNPROTO
Viewpoint
TexturedBackground
TexturedBackgroundLight
WoodenBox "wooden box"
WoodenBox "wooden box(2)"
WoodenBox "wooden box(1)"
E-puck "e-puck"
translation -0.578 -0.336 -6.43e-05
rotation -0.000431 -0.000292 1 -1.66
name "e-puck"
controller "epuck_avoid_collision"
controllerArgs
window "e-puck"
customData ""
supervisor FALSE
synchronization TRUE
Selection: E-puck (Robot)
Node
Mass
Position
Velocity
DEF:
Print EXTERNPROTO
...ject3\controllers\epuck_avoid_collision\epuck_avoid_collision.c
epuck_avoid_collision.c
#include <webots/robot.h>
#include <webots/distance_sensor.h>
#include <webots/motor.h>
// time in [ms] of a simulation step
#define TIME_STEP 64
#define MAX_SPEED 6.28
// entry point of the controller
int main(int argc, char **argv) {
// initialize the Webots API
wb_robot_init();
// internal variables
int i;
WbDeviceTag ps[8];
char ps_names[8][4] = {
"ps0", "ps1", "ps2", "ps3",
"ps4", "ps5", "ps6", "ps7"
};
// initialize devices
for (i = 0; i < 8 ; i++) {
ps[i] = wb_robot_get_device(ps_names[i]);
wb_distance_sensor_enable(ps[i], TIME_STEP);
}
WbDeviceTag left_motor = wb_robot_get_device("le
WbDeviceTag right_motor = wb_robot_get_device("r
wb_motor_set_position(left_motor, INFINITY);