

# SPQR Team - Homework 2017

**1.A** Install the software (<https://github.com/SPQRTeam/spqrnao2017b/wiki>)

**1.B** Create a new Representation and a new Module: the update function of the module has to display:

- the robot pose  $\langle x, y, \theta \rangle$ ;
- the ball position  $\langle x, y \rangle$  (both relative and global);
- joints value;

**2.A** Filter the ball perception and make the robot disregard balls that are more than 2 meters away from the robot;

**2.B** Use the previously written module to save some images acquired from the camera;

**3.A** Write a behaviour that makes the robot “WalkTo” the ball;

**3.B** Extend the previous behaviour and make the robot walk around the ball;

**4.A** Write a striker behavior that makes the robot kicking the ball towards its own goal;

**4.B** Test everything simulating two robots (striker and goalie).