**Preliminary designs, sketches, etc., outlining your ideas so far**

* Set the sensors (ultrasonic and light) as close as possible to the floor in order to better detect black lines and obstacles.
* Distribute enough weight toward the front of the robot so as to avoid wheel slippage
* Avoid adding too much weight
* Make the wheel axle narrow so the robot can more easily avoid the obstacles (allows tighter turns)
* One EV3 brick will reduce communication complexity for the software team, and will be enough to accommodate all motors and sensors.

Hardware components:

* 2 motors for general movement
* 2 motors for loading and launching
* 1 single brick design to reduce weight
* 2 ultrasonic sensors (for block/object detection)
* 2 light sensors for Odometry Correction
* 1 adjustable launching arm (use of elastics, and 2 motors)