Robotic Pet Chase – Project Proposal

**Objective**

This robotic pet will lead the user on a chase by executing random movements with varying durations. To “catch” the robot, the user will have to press the button on the pet, which will then increment the difficulty level. An ultrasonic sensor mounted on a servo motor will be used by the pet to check for and evade obstacles (e.g. wall, table leg, user…etc.) during the chase.

**List of Components**

* Car platform x 1
* DC motors x 2
* Standard servo motor x 1
* Ultrasonic sensor x 1
* Lego NXT touch sensor x 1
* Arduino Uno x 1
* Motor Shield x 1
* Lego NXT x 1