Introduction to LEGO Mindstorms 2.0

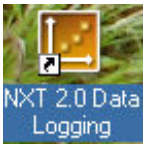
1. What's in the Kit?

Educational Base Set	Educational Resource Set
	

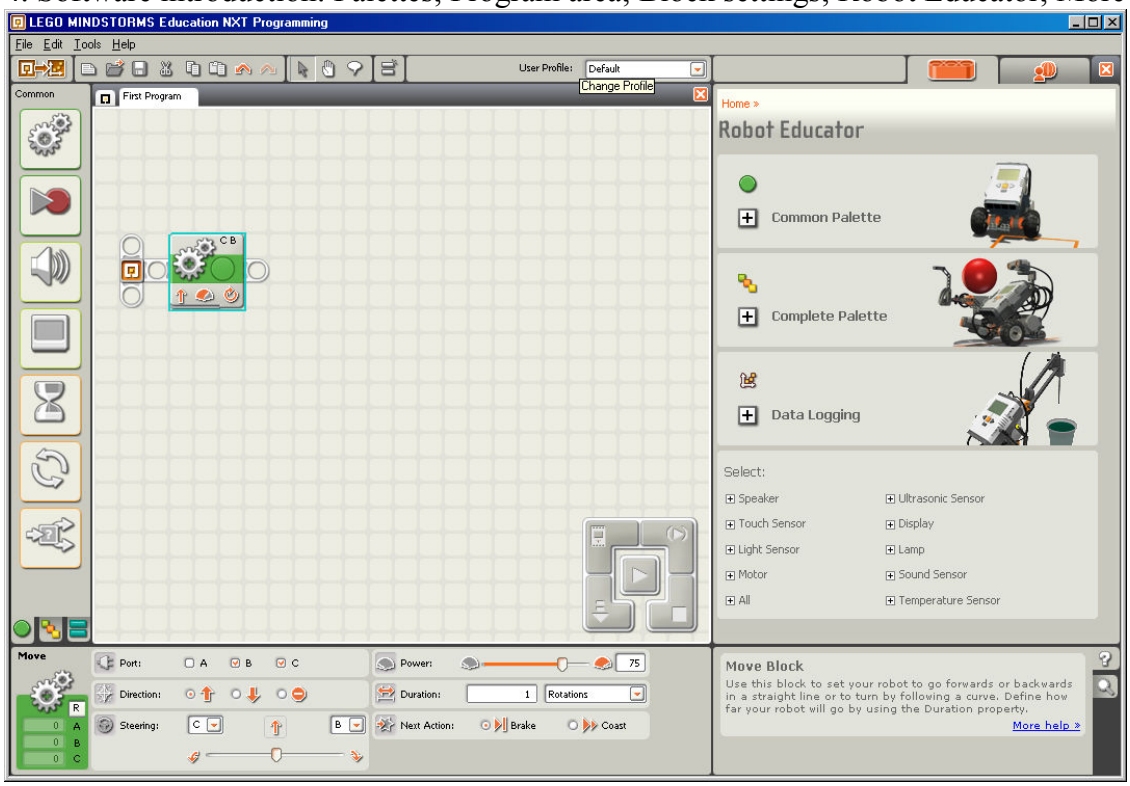
2. Key elements…

NXT (Brain)	Servo Motors	Light Sensor	Touch Sensor	Ultrasonic Sensor
				

3. Installing the software: Programmer and user guide



4. Software introduction: Palettes; Program area; Block settings; Robot Educator; More Help



5. Let's start playing (oops, I mean programming).

    Start new program
    Use first Common Palette example: 1. Play Sound
    Build it.
    Download it.
    Run it.
    Experiment with new sounds/tones.

6. Get a move on
    Common Palette Examples 3-7
    Open loop. Closed loop. Our experiment with Time vs Rotation
    Sample Lesson Plan

7. The most basic Program Structure:
    Loop: Drive in a square: Example 8

8. Using sensors
    Sensors are Inputs. They measure things.
    Threshold concept.
    Above or Below threshold?
    True/False and Yes/No.

9. Program Structure: Decision Making
    Wait-for: Example 16 (Stop at line)
    Switch: Example 17 (Line following)

10. Data Logging
    Stand alone logging
    Coordinated Logging