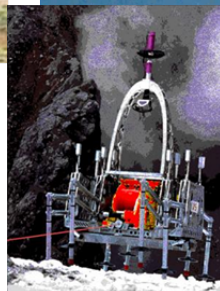


# **INTRODUCTION TO NXT**

There are many different types of robots:  
Think about the **4 D's** - which robot does which?

**DULL**   **DANGEROUS**   **DELICATE**   **DIRTY**



You will be using the. . .



**NXT Robot Platform**

**NXT hardware**

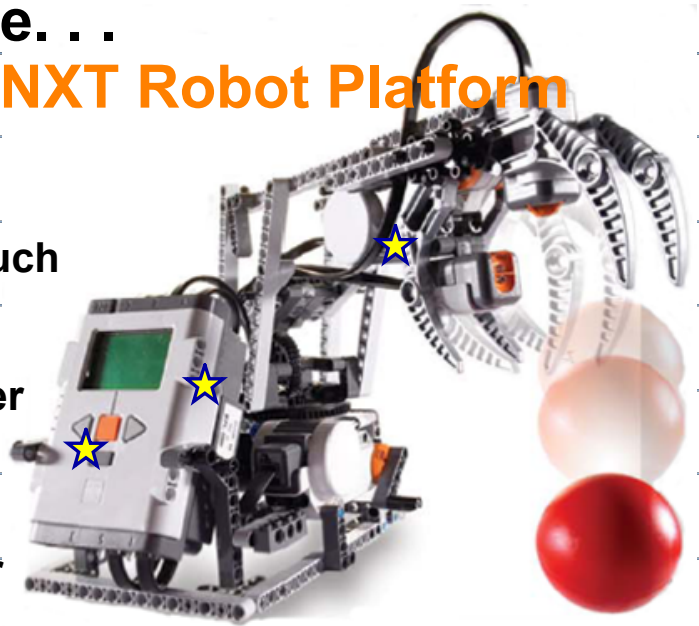
what you can see and touch

**NXT firmware**

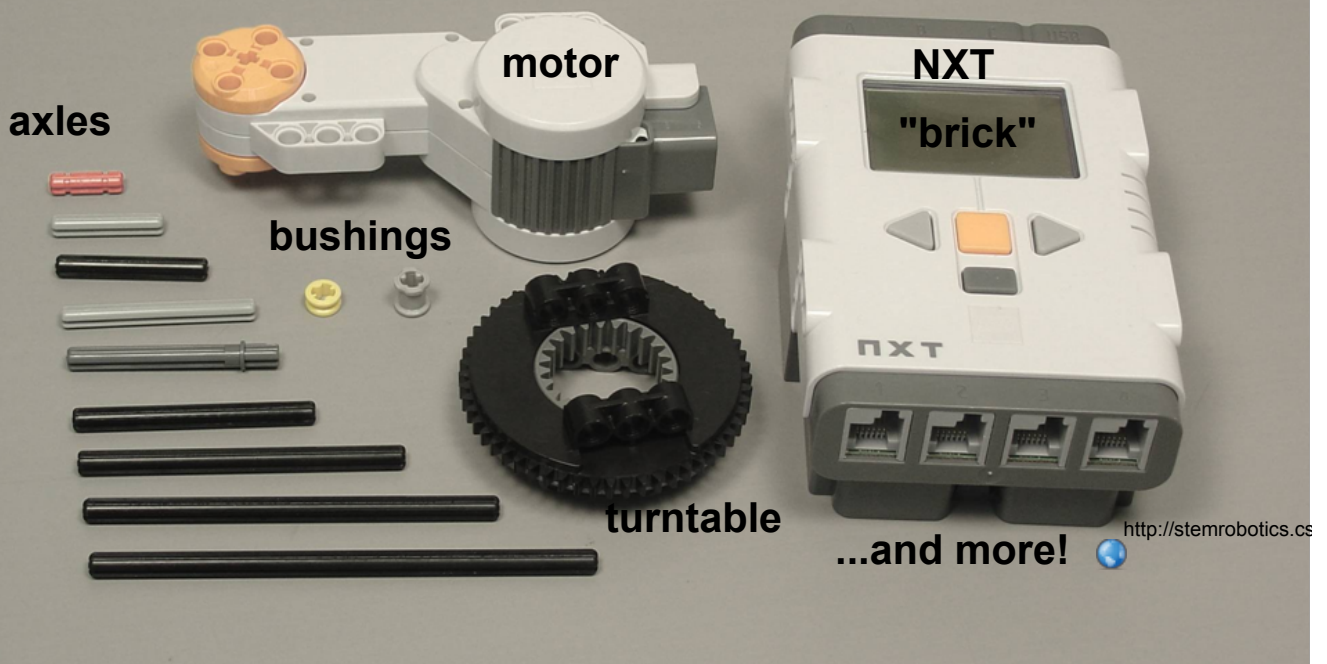
instructions manufacturer gives robot

**NXT software**

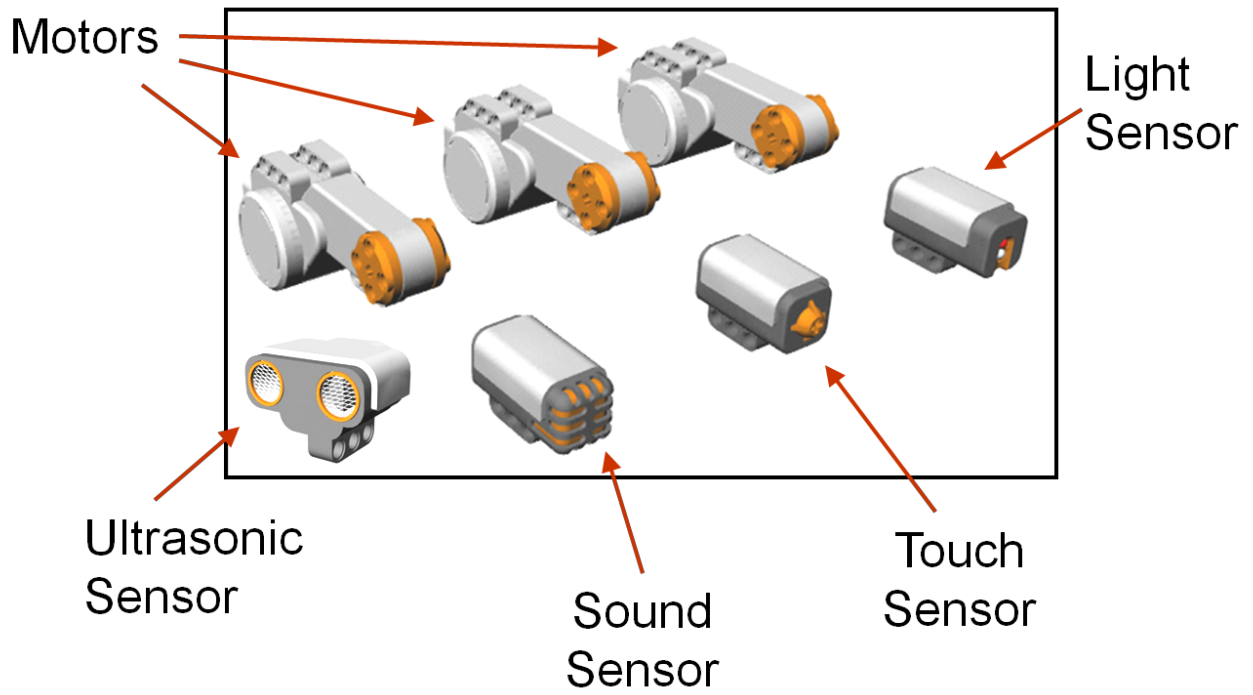
instructions programmer (**that's you**) gives robot



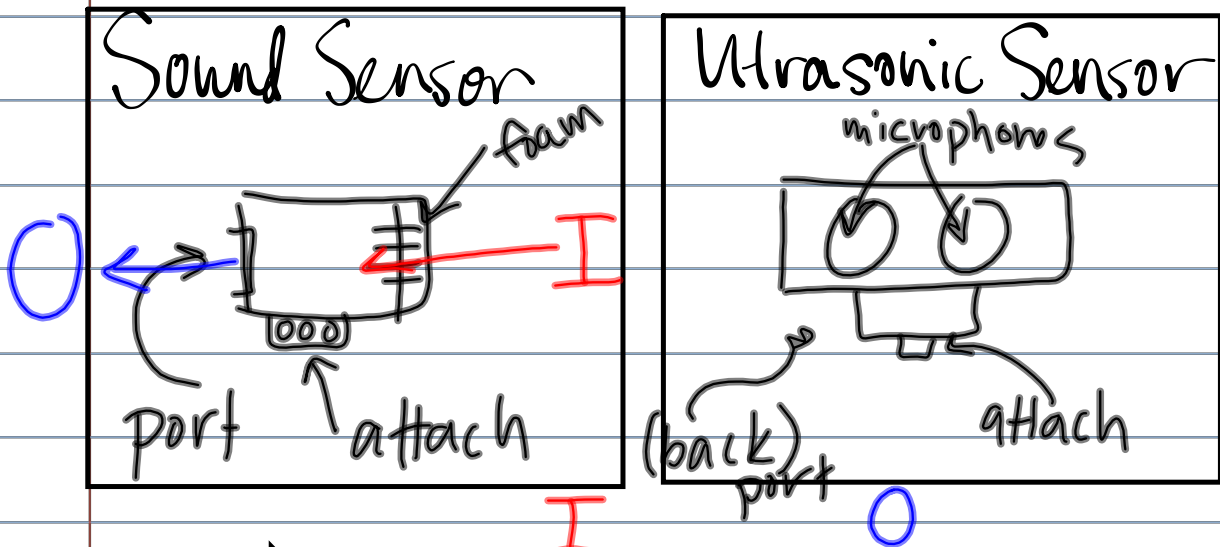
# Building with LEGO pieces



# LEGO motors and sensors

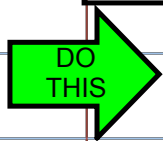
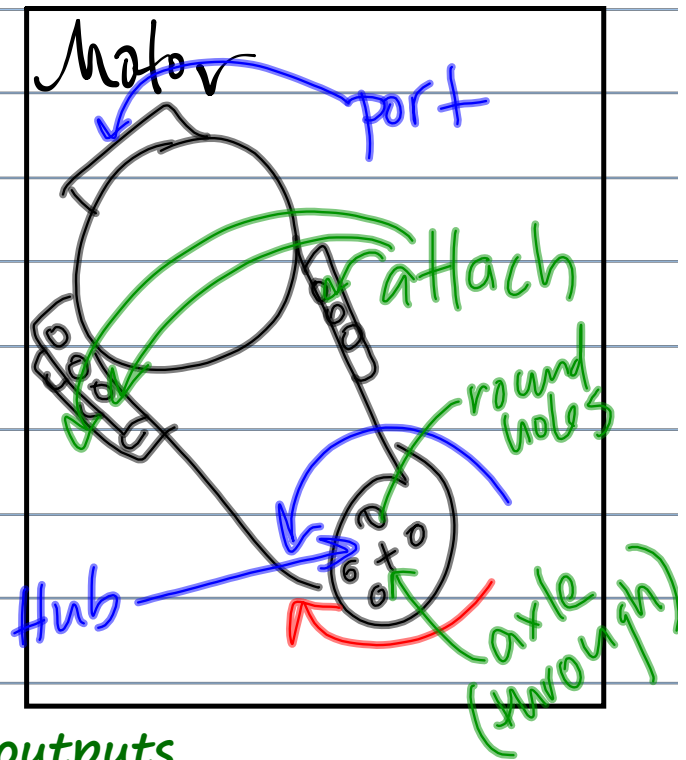
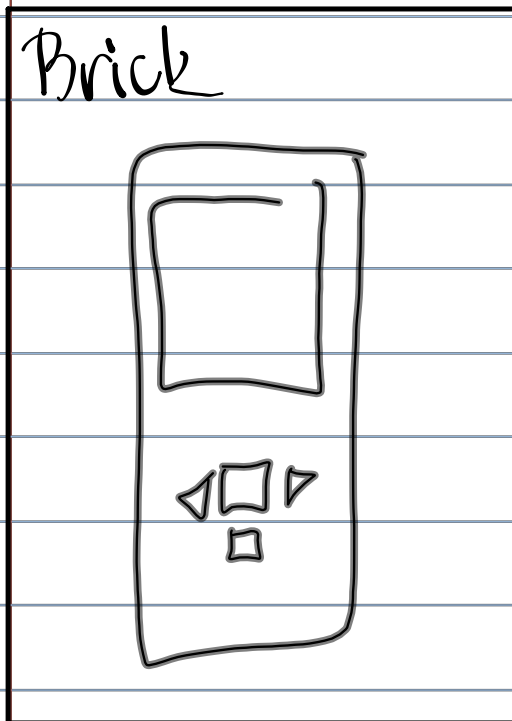


# Draw and label each sensor:



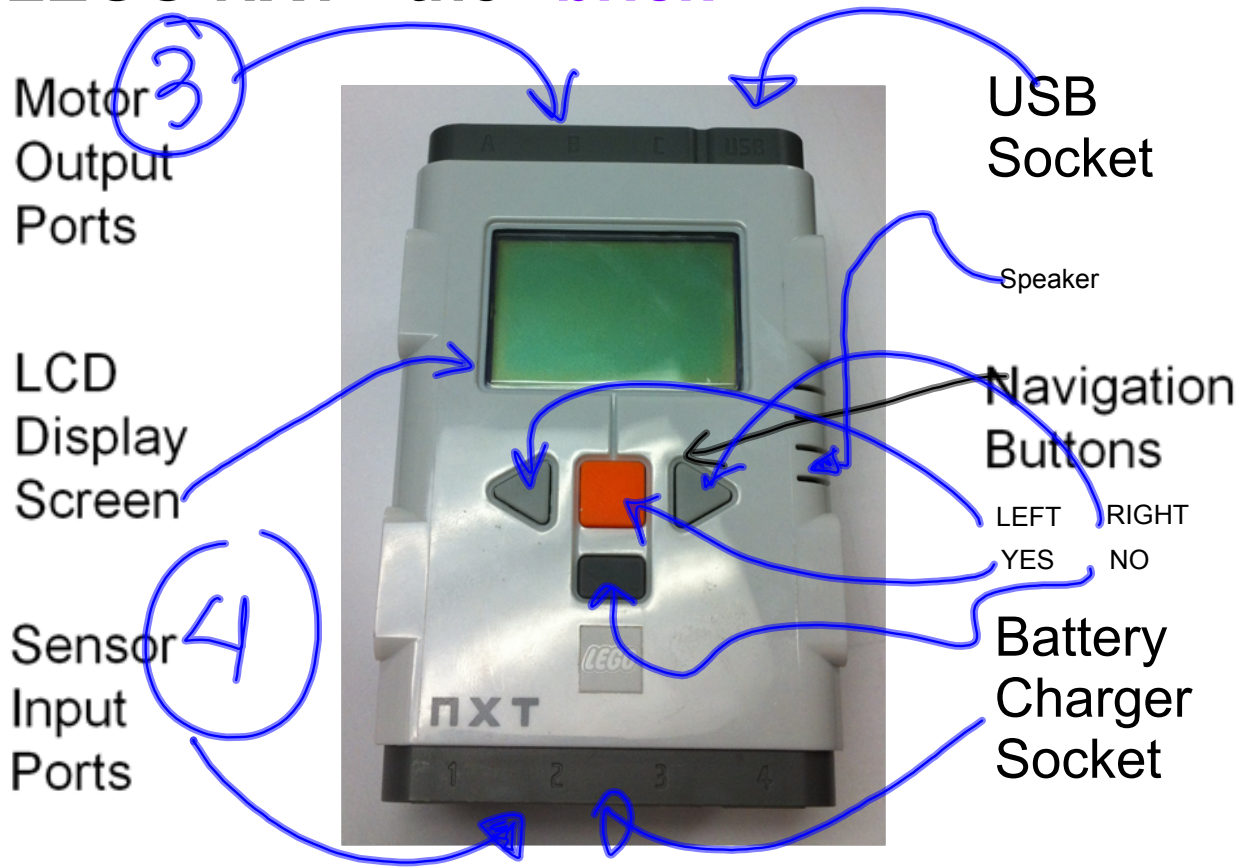
Label inputs and outputs  
for each NXT component.

# Draw the Brick + motor



Label inputs and outputs  
for each NXT component.

# LEGO NXT - the "brick"





## **LEGO - not just a toy...**

### **Rubik's Cube Solver**

[http://www.youtube.com/watch?v=5fAn5A0HbhU&feature=player\\_embedded](http://www.youtube.com/watch?v=5fAn5A0HbhU&feature=player_embedded)

### **Sudoku Solver**

<http://www.youtube.com/watch?v=Mp8Y2yjV4fU>

### **Portrayer**

[http://www.youtube.com/watch?v=\\_ogQuLdEcBY&feature=player\\_embedded](http://www.youtube.com/watch?v=_ogQuLdEcBY&feature=player_embedded)

### **Medical Research**

<http://www.youtube.com/watch?v=WBEtUJmp05w&feature=youtu.be>

