

## CS 444 - Project 1 - Stage 3

- \* Project 1 - Stage 3 is constructing the "classic"/basic Lego Mindstorms robot.
  - \* If you don't have them already, I will give you your team's NXT brick and the plastic box with the Lego and Technic and other pieces we are calling the kit here.
  - \* You will be given the instruction booklet for constructing this robot so when you complete Project 1 - Stage 2 (inventorying the pieces in your team's assigned kit).
    - \* For this stage, you still do not need the power adapter or the USB cable.
- \* **NOTE** -- for Project 1, you are expected to build **exactly** the robot specified in this booklet on **pages 8 to 22 (steps 1 through 17 given on pages 8 to 22)** -- we will be adding sensors later, and you will get a chance to create and build your own robot designs later this semester.
- \* **REMEMBER:** as will always be the case in this class, you are expected to work as a team for all parts of all projects.
  - \* Make sure **each** team member present gets a chance to gather the parts for some steps, and make sure **each** team member present gets a chance to put the pieces onto the developing robot for some steps
  - \* ...but ALL are participating by paying attention and watching even when they are not gathering parts or putting them together.

### constructing the "classic"/basic Lego Mindstorms robot

- \* carefully follow **the steps labeled 1 through 17 on pages 8 to 22** of the instruction booklet
  - \* note that each numbered step is preceded by a smaller blue rectangle listing the type and number of the pieces being ADDED in that step;
    - \* In general, best practice is to gather all of the pieces needed for a step, and then add them to the developing robot as depicted in that step.
    - \* So -- since you are working as a team -- my suggestion is that one team member should gather all of the pieces for a step, and then another team member should add the pieces as depicted in that step (perhaps with another gathering the pieces for the next step? or perhaps the other member is watching or advising in some way.)
- ...BUT, again, make sure EACH team member present gets practice BOTH with gathering the parts for a step and adding the parts as depicted in a step.

### after your robot is built

- \* when you have completed **step 17 on page 22** of the instruction booklet:
  - \* put your name on the NEXT list on the board in BSS 313
  - \* when it is your turn, I will come to you and inspect your completed robot, checking to see if you have basically built it correctly. And when I check off that you have done so, you have completed STAGE 3 of PROJECT 1 -- ASK ME what you should do next...