**Figure Eight Project Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Task:** Program your DomaBot to complete a figure eight. You will be assessed on the following criteria (review the attached rubric for more specifics):

**Figure-Eight (40%):** You must program your robot to complete a figure eight. You will be assessed on how well your robot completes the figure eight.

**Programming Plan and Calculations (30%):** Keep track of your calculations so you can precisely program your robot to complete the figure-eight. You should include at minimum the following calculations, showing all work:

* Calculation of wheel circumference
* Calculation of all rotations or degrees you enter into the “Move” block

You will also turn in your programming plan, approved by Ms. Belton.

**Reflection (25%):** After the completion of the obstacle course, you must complete a reflection answering the following prompts in complete sentences:

* What was your favorite part about this project? Why?
* What was your least favorite part about this project? Why?
* How did your robot do? Were you surprised at your robot’s performance? Why or why not?
* What did your robot do well? What would you improve on your robot? Why?
* What is something you wish you were given the opportunity to do with this project? Why?
* What is something you would change about this project? Why?

**Peer Evaluation (5%):** This is confidential. You will be assessed by your team on your responsibility, leadership, teamwork, work ethic, and reliability.

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| **Name:** |
| **Team Members:** |
| **CATEGORY** | **4** | **3** | **2** | **1** |
| **Figure-Eight (40%)****Score: \_\_\_\_** | * Your robot completed 100% of the figure-eight.
 | * Your robot completed 75% of the figure-eight.
 | * Your robot completed 50% of the figure-eight.
 | * Your robot completed 25% of the figure-eight.
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| **Programming Plan and Calculations****(25%)****Score: \_\_\_\_** | * Completed programming plan
* Calculation of wheel circumference
* Calculation of all rotations / degrees
* Calculations show work
 | * Programming plan about 75% complete
* Includes calculations for most, about 75%, of rotations / degrees.
* Most, about 75%, of calculations show work
 | * Programming plan about 50% complete
* Includes calculations for some, about 50%, of rotations / degrees
* Some, about 50%, of calculations show work.
 | * Programming plan about 25% complete
* Includes calculations for few, about 25%, of rotations / degrees
* Few, about 25%, of calculations show work
 |
| **Reflection (25%)****Score: \_\_\_\_** | * Answers all six of the prompts
* All prompts are answered thoroughly
* All prompts are in complete sentences
* Responses show metacognition and are reflective in nature
* Contains no grammatical or spelling errors
 | * Answers five of the prompts
* Most (>75%) of prompts are answered thoroughly
* Most (>75%) of prompts are answered in complete sentences
* Most (>75%) responses show metacognition and are reflective in nature
* Contains few distracting grammatical or spelling errors
 | * Answers three or four of the prompts
* Some (>50%) of prompts are answered thoroughly
* Some (>50%) of prompts are answered in complete sentences
* Some (>50%) responses show metacognition and are reflective in nature
* Contains some distracting grammatical or spelling errors
 | * Answers two or fewer prompts
* Few (<50%) of prompts are answered thoroughly
* Few (<50%) of prompts are answered in complete sentences
* Few (<50%) responses show metacognition or are reflective in nature
* Contains many distracting grammatical or spelling errors
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| **Peer Evaluation****(5%)****Score: \_\_\_\_** | Your team members report that work was evenly shared and you were a valuable team member. | Your team members report that work was fairly evenly shared and that you did what you were assigned. | Your team members report that the work was not evenly divided and that you contributed only when specifically asked. | Your team members report that the work was not evenly divided and that you contributed very little. |