**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. |
| **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 |
| **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. |