ECET365 Week 7 iLab Cover Sheet

DeVry University

College of Engineering and Information Sciences

**Course Number:** ECET365

**Professor:**

**Laboratory Number: 7**

**Laboratory Title: Integration of Subsystems**

**Submittal Date:**Click here to enter a date.

***Objectives:***

 A. Complete the assembly of project subsystems.

 B. Test the operation of the completed project.

***Results:***

***Conclusions:***

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| --- | --- | --- | --- | --- | --- |
| ***Team:*** |  |  |  |  |  |
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|  | Name |  | Program |  | Signature |

***Observations/Measurements:***

A. Visual Subsystem

 1. Test Method: (Briefly describe the test method used to verify the correct operation of the visual subsystem.)

 2. Test Results: (Record the measurements that indicate the visual subsystem is operating correctly).

 B. Steering Subsystem

 1. Test Method: (Briefly describe the test method used to verify the correct operation of the steering subsystem.)

 2. Test Results: (Record the measurements that indicate the steering subsystem is operating correctly.)

 C. Visual sensor and steering operation interaction

 1. Test Method: (Briefly describe the test method used to verify that the visual sensor subsystem and the steering subsystem are working correctly together.)

 2. Test Results: (Record the measurements that indicate the visual sensor and steering subsystems are working correctly together.)

 D. Drive Motor Subsystem

 1. Test Method: (Briefly describe the test method used to verify that the drive motor subsystem is working correctly.)

 2. Test Results: (Record the measurements that indicate the drive motor subsystem is operating correctly).

 E. System Operation

 1. Test Method: (Briefly describe the test method used to verify that the system operates correctly when all the subsystems are operating.)

 2. Test Results: (Record the measurements that indicate the system is operating correctly.)

**Questions**

1. Have your problems been mostly hardware or software? Explain your answer.
2. How does your estimate of energy required to do two laps compare with your measurements?
3. What is the pulse frequency of the drive motor control signal?
4. (Optional) How many laps can the car perform?