Final Report Clarifications:

*A 9-to-11 page final report reflecting on the performance of their robot.* Report includes:

* Dynamic force analysis of single leg using Matlab
  + **Use Matlab to find the internal forces and required input torque. Assume that the ground forces on the leg are proportional to the robot’s weight and the coefficient of friction of the track . Plot the internal forces and ground forces as a function of the input angle of the leg.**
* Dynamic force analysis of the whole walker using Creo Mechanism or Matlab.
  + **Use Creo and assuming that you know the robot’s actual speed, gait, and the ground reaction forces, compute the required torque to derive your walker. Plot the required input torque as a function of the angular position. How does the torque requirements compare to the motor capability and your selected gear ratio?**
* Calculation of the expected velocity based on PVA.
  + **Calculate the velocity at the feet as a function of input angle and assuming a constant angular velocity (**
* The analysis/procedure you used for calculating the competition day time to ensure traversing the track in less than 3 minutes.
* Comparison between calculated versus measured velocity of the walker.
* Reflection on your machine’s performance, challenges it faced, and suggest ways to overcome them.
* A final CAD if changed from the design report.
* A final Budget for the project.
* Photos of robot disassembly and studio cleanup.
  + **This should show that you successfully disassembled the robot and sorted the parts in the assigned boxes and that your workstation in clean**

*The final report should not include materials presented in the interim report.*