**ECE183DB Team People: Technical Questions Report Summary**

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**Discussions:**

1. How we want to control the joint of the arm? PID would be hard to tune the parameter. LQR would be the better
2. 99% of controllers in the world are PID. The proposed LQR are usually papers who want to “sell” LQR controllers
3. For PID, you don’t even need to know the analytical of the plant. You introduce D to increase damping and I to eliminate steady state error.
4. Using Webots to do velocity control and position control.
5. Take into account of the velocity of the motor which is not controllable.
6. Velocity tells you if you are staying there or about to deviate from that position
7. Integrator is introduced when we are having steady state issue. PD would never be able to eliminate it if we have an issue
8. TRAJECTORY:
   1. For every single joint, we take the initial value and the final value, and we take a function that will map between the 2
   2. Interpolation at the task space
9. In industry, people design trajectory use relative reference coordinate. We design a frame instead

**Decisions:**

**Action Items:**