

JD II Project Summary
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This project's purpose is to build an adjustable power supply able to supply voltages from 2-14V under load (up to 1.5A) while displaying the voltage and current to a local display and programmable over a USB serial port. Voltages and currents need to be adjustable both with buttons on the power supply and over the USB serial connection, using the standard SCPI instrumentation protocol.

In order to successfully complete this project in the given 10 weeks, we split up the work in two ways. Dylan worked on the coding side, while Alex worked on the physical hardware side. One of the main issues we ran into was how we were going to implement a DAC into our project. We were unsure if we should send the byte as single bits. We ended up settling on a MCP4802 DAC that allows us to send the bits through the digital pins on the arduino as 2 separate bytes that the DAC interprets and outputs a voltage. This project also allows us to further our skills at working in groups by communicating and working with others.

Milestone		Due Date	Date Done			Last Updated	6/2/23
Design 1		4/12/23	4/10/23				
Design 2		4/19/23	4/19/23				
Build 1		4/26/23	4/24/23				
Submit Block 1		4/21/23	4/21/23				
Submit Block 1 Docs		4/28/23	4/28/23				
Block 1 Demo		5/3/23	5/3/23				
Build 2		5/10/23	5/10/23				
Submit Block 2 Docs		5/12/23	5/12/23				
Block 2 Demo		5/17/23	5/17/23				
Build 3		5/24/23	5/24/23				
System Verification		6/2/23	6/2/23				
System Checkoff		6/7/23					