Project Summary

As the majority of the gadgets are DC powered so there is a need to design special power supplies for them. Most of them work on batteries, but it depends on the functionality and the workload of the gadget. You cannot power up every smart equipment on batteries because their power requirement also ranges up to 30V DC. For that purpose we need to design a power supply that can convert the 110 V AC voltage from the wall outlet to the required DC voltage of the gadget. Our plan was to create a PC controlled power supply that we could control using a pc, manual knobs and a touch screen. Unfortunately, due to the COVID-19 pandemic, we weren't able to acquire any parts and that made it much harder for us to use parts so we did not use a touch screen and created simulations for all the rest that we were supposed to use.
One lesson we have learned from this project is that even though we were put in bad circumstances and were not able to acquire any parts, we worked together as a group and made it possible to create everything via simulations only and make it all look real, and that would have been impossible if it weren't for the team work that we put in.

Project Block Allocation & Timelines

Name	Assigned Blocks	Literature Review	Designing	Simulations	Finalization
Abdulla Al-Ansari (Osu id: 932-707-683)	Block 5 & 6	2 weeks	4 weeks	2 weeks	1 week
Saoud Ashkanani (Osu id: 933-196-784)	Block 2 & 3	2 weeks	3 weeks	3 weeks	1 week
Abdulaziz Almannai (Osu id: 933-227-105)	Block 1 & 4	2 weeks	5 weeks	2 weeks	1 week