

## Charging Station Progress

Group Number: 22A

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Group Client: Pr. Bigelow

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During our 4<sup>th</sup> group meeting, we started diving deeper in the materials and construction practices necessary to complete the Go-Kart Charging Station. Currently our group is in a state of unknowing, due to the possibility of scaling the Go-Kart portion of the design into something resembling a Dune Buggy. A Dune Buggy would be a much larger vehicle, but it would be able to allow one of the group members to drive the vehicle. This was the first meeting where we heard of the possibility of changing the sizing of the Go-Kart. Now we are waiting to hear back from the department to see if we could get an additional \$7,000 for the new structure.

We are still looking for space to construct our Charging Station. Since our side of the project is relatively small, we are hoping that we are able to construct the Charging Station in the Senior Design Lab. Once we have a working prototype of the Charging Station, we will be able to start testing the station in the location of the vehicle.

One of the requirements for the meeting was for each group member to bring some information detailing either Battery information or Battery Charging Schematics. We collectively looked at the information brought by each group member. Looking over schematics gave us a better idea of what we need to place on our equipment lists. If the size of the go-kart changes we are hoping that the Charging Station and the Battery Sizing will only be a scaling issue. If it is only a scaling issue then we will be able to get started on creating some schematic characteristics. Once all of the battery and schematic documentation was looked over, we gathered all of the papers into one location. We hope that we will be able to buy a binder to help with group organization of this material.

Outside of discussing the battery type and charging circuit, we briefly talked about the microcontroller that we were planning on using to give the user charging information. We found that the desired microcontroller is currently not in stock. This left us with the option of either going through a different supplier or switching to a different microcontroller. We decided that we would wait to make a final decision on the microcontroller we will use.

The next meeting was set for 4:00 Wednesday and we are hoping that everyone will be able to make it. The only reason we could foresee a problem would be due to Career Fair Interviews. During the next meeting we hope to expand on several of the topics we have been discussing and further determine which path we are going to go down with battery type and sizing.