Hamzah Abeer

Abdul Aziz Almarzougi

Nick Riesberg

Derek Schmitz

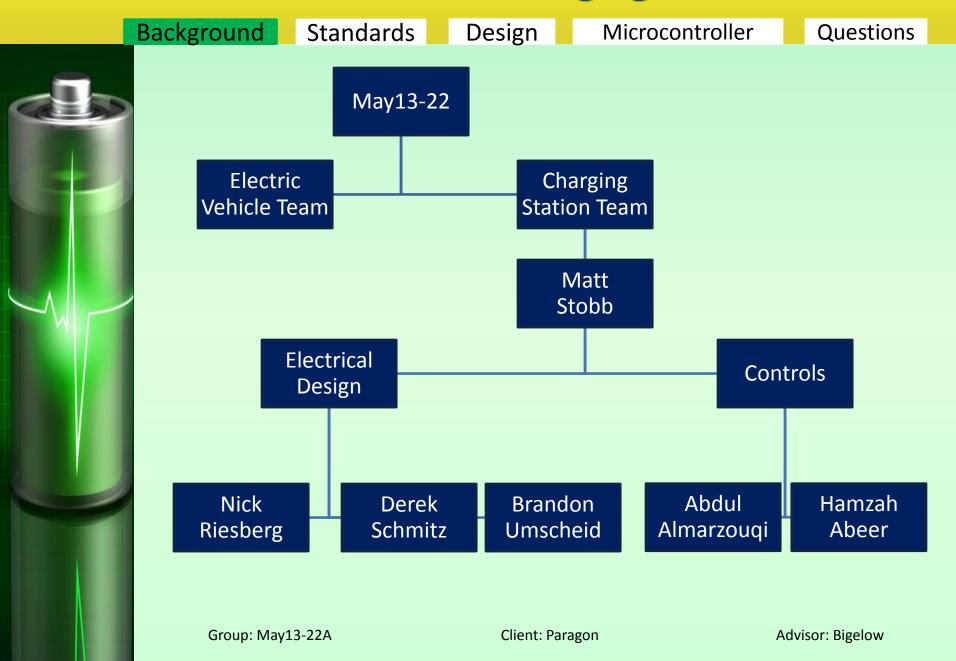
Matt Stobb

Brandon Umscheid

Group: May13-22A

Client: Paragon

Advisor: Dr. Bigelow



Background Standards

Design

Microcontroller

Questions



- Based in Nevada, IA
- Family-owned company that started out making popcorn machines years ago
- Markets in 43 countries
- Main retail is concession stands and supplies
- http://www.manufacturedfun.com/



Background

Standards

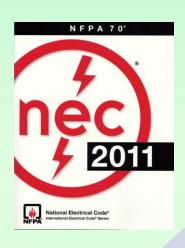
Design

Microcontroller

Questions



Standards



SAE **Technical**

Standards





2011 National **Electrical** Code

Group: May13-22A Advisor: Bigelow Client: Paragon

Background Standards

Design

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Questions



Requirements

- > Rate of Charge must be at maximum 6-8 hours to reach full capacity
- The Charging Station must be designed will all current standards
- Charger maintains battery life for 3-5 years
- > State of Charge (SOC) indicator



Background Standards

Design

Microcontroller

Questions



Non-Technical Requirements

Charger is Safe

- Charger is Reliable
- Easy to use
- May be used for different capacities

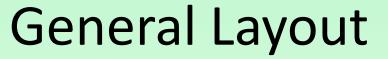
Background |

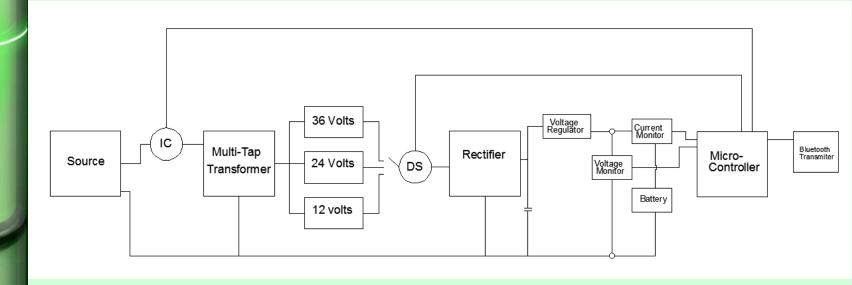
Standards

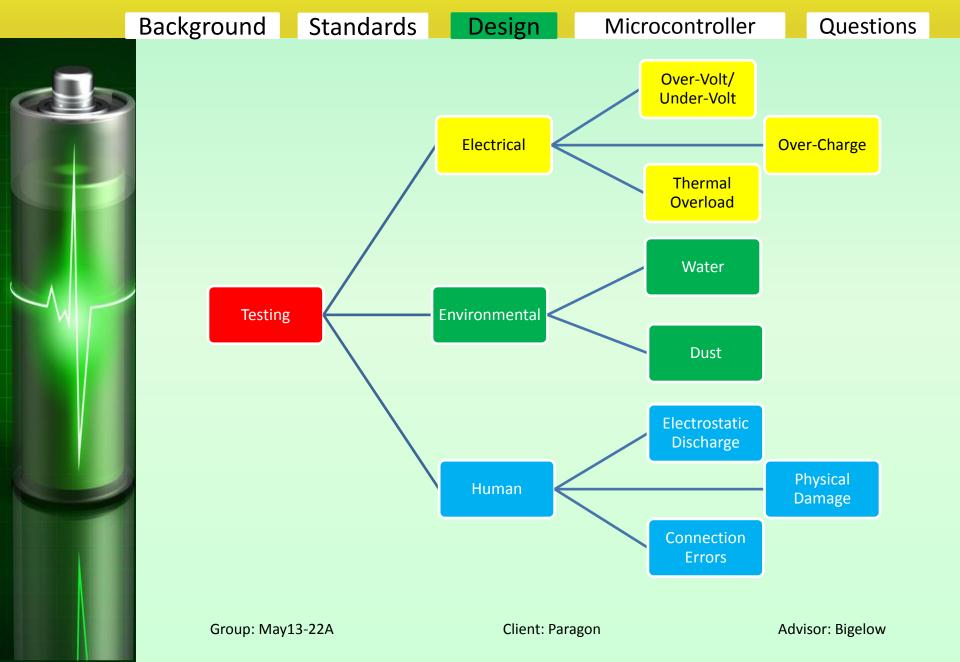
Design

Microcontroller

Questions







Background Standards

Design

Microcontroller

Questions



Requirements

- SOC(State of charge)
- Estimated time of charging
- Automatic shut-off
- Graphical User Interface



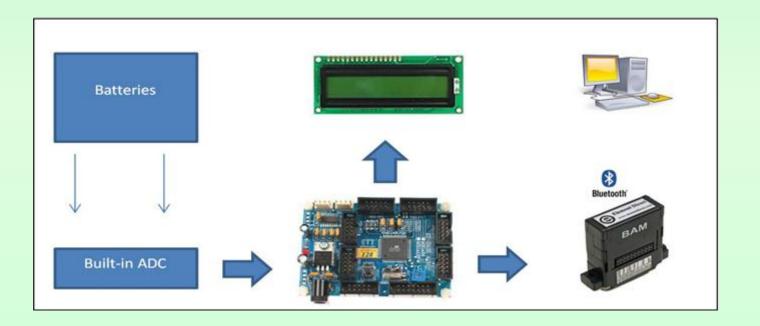
Background Standards

Design

Microcontroller

Questions





Advisor: Bigelow Group: May13-22A Client: Paragon

Background ___

Standards

Design

Microcontroller

Questions



Questions?

Website: isuevcs.weebly.com