EDSGN 100    INTRODUCTION TO ENGINEERING DESIGN

FALL 2012

Guidelines for the second design project report on Harris Mobile Electronics Alternative Charging System Project:

NOTE: Your final web report should be done in HTML format (by any webpage editor) and should begin with a standard main cover page. The report website should be posted on www.personal.psu.edu website or http://www.weebly.com/. This web report is the culmination of your project and will be visited by our project sponsor and other students and faculty. To facilitate browsing, reading, and indexing of the large number of reports that will be submitted, we require some standard items for the web report’s “cover page”.

1. The project report must include (but not limited to) the following items (Note: We do not seek to limit your creativity in documenting your project, merely to define some minimal information that must be provided when some one first accesses your project page.):

   (1) A cover page indicating the design title (large font size), the sponsor, Penn State and Harris logos, course number and name (normal/small font size), section number, team number and names, team photo, submitted by and submitted to (with URL links to the person's website created for this course), a descriptive image (photo of prototype/model, or CAD model) of the final design (including labels if necessary), and date of submission.

   (2) Abstract (or executive summary) for the report (about 50 words)

   (3) Table of contents (the report must be easy to navigate) with email links to the author of each chapter

   (4) Introduction

   (5) Description of the design task

      • Problem Statement (be specific about your “use case”)

      • Mission Statement (be specific about your “use case”)

      • Design Specifications

   (6) Design process/approach – design matrix

      • Project Management – Gantt Chart

      • Concept Generation – Brainstorming (Briefly describe FIVE design concepts with sketches)

      • Design Idea/Concept Selection – Design Matrix

      • Trade studies

      • Description of the Best Design Selected

   (7) Prototype/Model

      • Relative design drawings (by CAD) detailing the final design solution

      • Prototype scale and digital image(s) of the prototype

      • Design features

   (8) Engineering Analysis including cost analysis

   (9) Summary and conclusions

   (10) Attachment of the PowerPoint Presentation Slides

   (11) Attachment of the tri-fold brochure

   (12) Acknowledgement (if any)

   (13) References (if any)

2. The project report must be published on the web before 5:00 p.m. on December 14, 2012.
3. **A hard copy** and an email with a subject “Section No. Team No.” indicating the URL of the lab report should be submitted to the instructor no later than 5:00 p.m. on the date specified on item 2 above for each section.

4. Please indicate the contribution each team member made to the lab report by placing the member’s name on the part he/she wrote.

5. Individual grades may be different from team’s grade depending on the member’s contribution and effort.

6. Use the following formats for labels and captions of figures and tables:
   **Table 1. Design Matrix**
   **FIG. 1. Image of Prototype**

7. Use the following formats for reference lists:


