

MP1 Design Review Presentation



SENIOR PROJECT TITLE

DATE: _____

- Team Member Name 1
- Team Member Name 2
- Team Member Name 3

PROBLEM ADDRESSED

- Describe the problem addressed by your senior project



THE IDEA

- Describe the Senior Project idea
- What is the value added for your product

APPLICATIONS

- Describe applications of your Senior Project
 - Present Applications
 - Potential Future Applications

END USER CUSTOMERS

- Describe who are/is your customers
 - Approval letter addressed to customer

FEATURE SPECIFICATIONS

- Describe product feature specifications

CONCEPTUAL DIAGRAM



PATENT SEARCH

<http://patft.uspto.gov>

- Describe result of Patent Search
- Show patent numbers (at least one) of closest matches
- Show patent abstracts

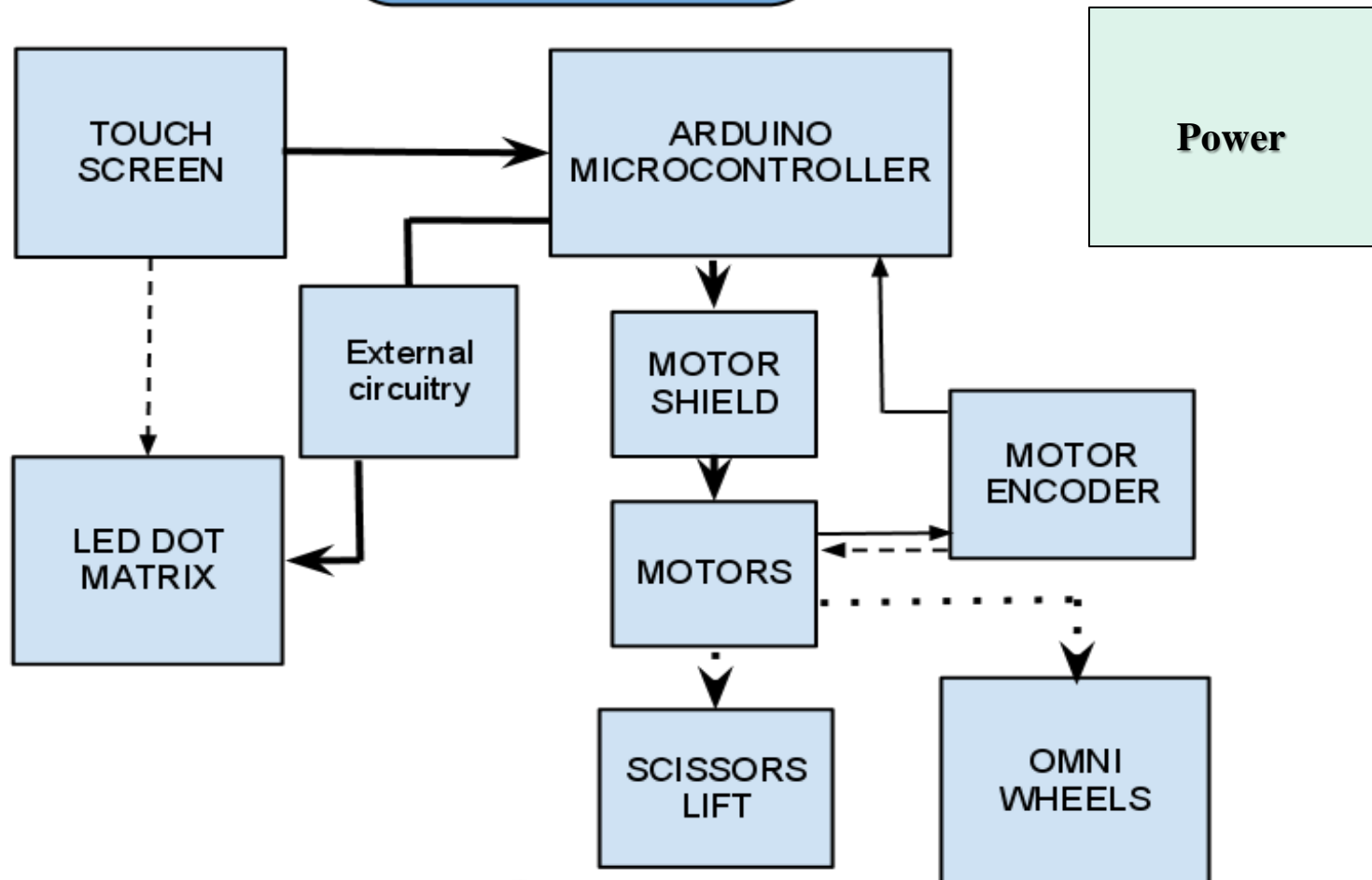
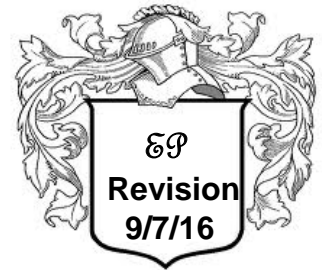
VALUE ADDED

- Describe your value added to the project

CONCURRENT ENGINEERING

- Describe all aspects of various Engineering majors needed to realize this design

(OMG) OMNI - DIRECTIONAL MOBILE GURNEY BLOCK DIAGRAM



BLOCK FUNCTIONAL DESCRIPTIONS

High level description of the blocks from your block diagram

- ✓ IDENTIFY THE HARDWARE AND SOFTWARE COMPONENTS OF THE DESIGN

DESIGN SPECIFICATIONS

- Describe design specifications

MECHANICAL SPECIFICATIONS

- Printed Circuit (PCB) design
- 3D Print Packaging Design

TEAM RESPONSIBILITIES

Breakdown of the major tasks and assignment to team members

MLESTONES

- Timeframe
- Timeframe

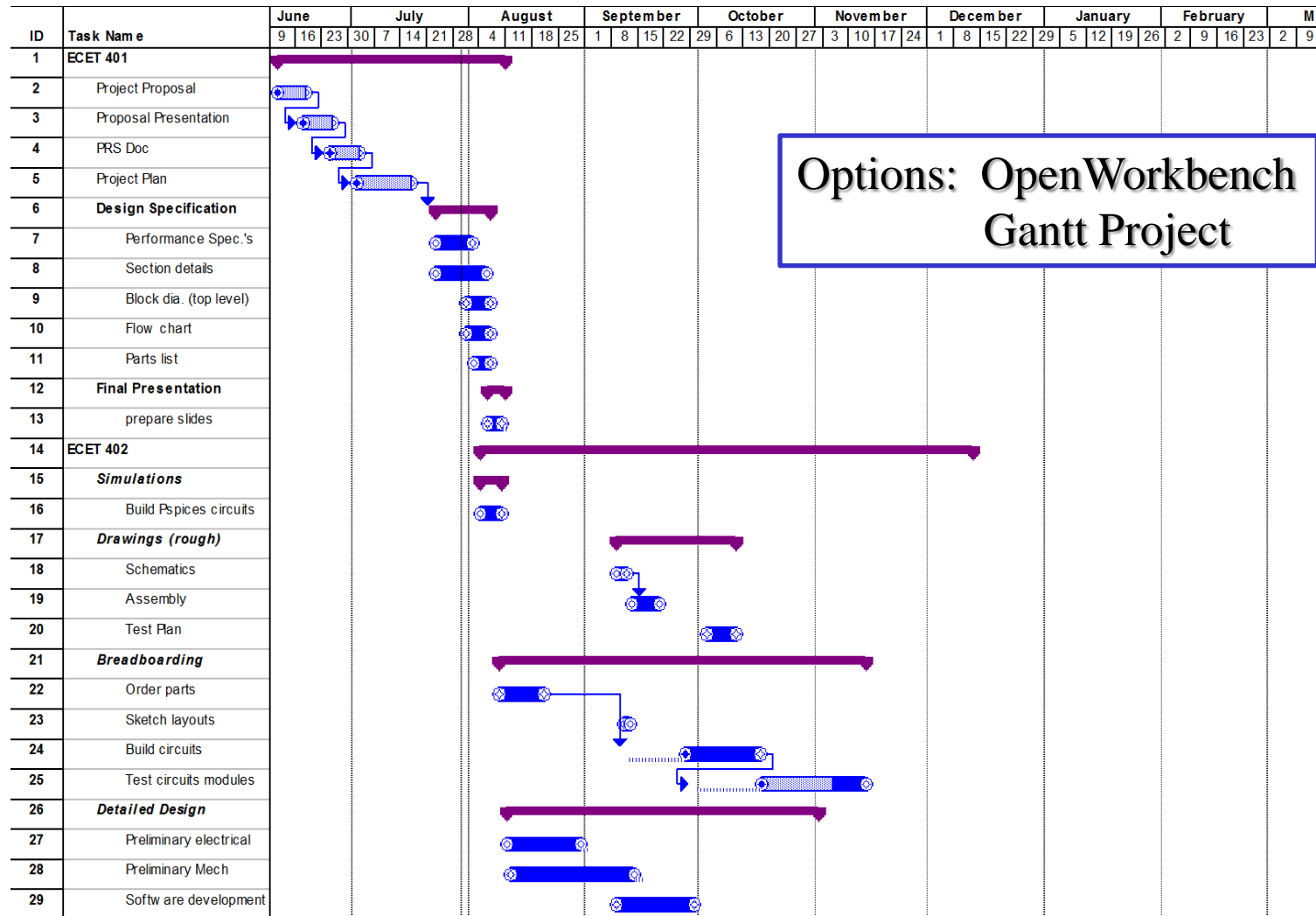
Milestone

Milestone

DELIVERABLES

What are you planning to deliver for each marking period

MP1 deliverable	MP2 deliverable
MP3 deliverable	MP4 deliverable



BOM ANALYSIS

Preliminary BOM (Bill Of Material → Spreadsheet)

1. Item Number
2. Part Number
3. Reference Designation
4. Primary Source
5. Second source
6. Part Description
7. Lead Time
8. Cost/Unit
9. Total Cost
10. On-Hand

USEFUL TIPS:

- ☐ ORDER SPARES
- ☐ ORDER FROM USA
- ☐ CHECK LEAD TIME
- ☐ USE PROVEN TECHNOLOGIES
- ☐ TRACK ORDER
- ☐ HAVE A PRIMARY CONTACT
- ☐ MONITOR EXPENSES Vs. BUDGET
- ☐ SECOND SOURCE FOR PARTS

COST ANALYSIS

Preliminary cost analysis. Does it fit within the budget?

If it does not fit, you must not quit

RISK FACTORS

List Risk factors, potential bottlenecks (roadblocks)

CONTINGENCY PLANS

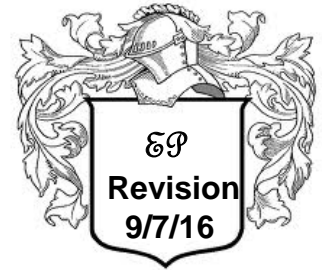
List Contingency plans

TESTING STRATEGIES

- ☐ Unit Testing
- ☐ Integrated Testing
- ☐ System Testing

OPEN ISSUES

List any open issues



RESOURCE REQUIREMENTS

Describe equipment needed to design, (HW & SW),
assemble and, troubleshoot this project

REFERENCES/ACKNOWLEDGEMENTS

PROFESSIONALISM → GIVE CREDIT WHERE CREDIT IS DUE!

List all source of information (Books, URLs, articles, magazines, television programs, etc....)

List Acknowledgments