# Meeting Activity Agenda

15001

Attendees:

- Adam Podolec: Electrical Engineer / Project Lead
- Megan Ehrhart: Senior Electrical Engineer
- Tyler Leichtenberger: Mechanical Engineer
- Noah Schadt: Mechanical Engineer / Team Facilitator
- Jared Green: Senior Mechanical Engineer
- Geni Giannotti: Biomedical Engineer / Treasurer

| Current Meeting | | Next Meeting | |
|---|---|---|---|
| Location: | BAD Lab | Location: | MSD Area |
| Start Time: | 12:45pm | Start Time: | 11:00am |
| End Time: | 2:00pm | End Time: | 2:00pm |
| Meeting Date: | Monday 11/10/14 | Meeting Date: | Tuesday 11/11/14 |

Meeting Agenda:

1. Team Dynamics Discussion
    a. Past week + Δ
    b. Any new scheduling conflicts or concerns?
    c. Check if any pet peeves or conflicts arose
    d. Role distribution; is anyone overworked or underworked?
        i. Is that a foreseeable problem for the DDR?
        ii. Does any team member need additional help to make the DDR outstanding?
    e. Open the floor to anyone for general comments/concerns
2. Prepare for meeting with customer
3. Planning/tracking – are we on-track? Have we left anything out?
4. Review individual tasks and confirm appropriate task distribution
5. Brownies
6. EE/MechE breakout
    a. MechE brainstorming session (Quick Pugh charts?)
        i. Design integration (Pugh?)
            1. Fabric integration of upper and lower brace
            2. Lower tether attachment
            3. Upper tether attachment
            4. Tensioning mechanisms
            5. Muscle attachment to upper brace
            6. Path of the power line
    b. EE's… you're all doing a pretty awesome job so just keep doing whatever it is you're doing ☺ its much appreciated

Old Business Items:

-

New Business Items:

-

Items Left Outstanding:

- Will need a table of flow down from ER all the way to components (flow chart?)

Action items – Owners / Deadline:

- Team Tasks - All
  - Keep track of action items from the review
- Adam Podolec
  - Prepare MSD II plan template for team to populate
  - Add video for dorsiflexion
  - Schedule meeting with Guide
  - Email Geni about solenoid
  - Looking into power options
  - Purchasing Solenoid hardware

  Long term
  - Bio
- Megan Ehrhart
  - Finish Layout PCB/SD distance sensing function
  - Test with Adam
  - Talk with Jared
  - Power ratings
  - Budget feasibility
  - MSD II (not sure what this means)

  Long term
  -
- Tyler Leichtenberger
  - Design attachment
  - Continue Muscle optimization
  - Iterate upper attachment
  - Increase severity of fishing line risk

  Long term
  - Color code risk table changes
- Jared Green
  - PCB Sensors / Schematic (almost done)
  - SD card selection (micro SD)
  - Power source (assist Megan)
  - MSD II project plan
  - Update Detailed design project plan on a weekly basis
  - Distance sensing – (Ideal position)

  Long term
  -
- Geni Giannotti
  - Update drawings (11/11)
  - Write test report

  Long term
  - Purchasing

- BOM
- Budget

❖ Noah Schadt

- Test plan for strain test / add details to prioritized tasks
- Continue Muscle optimization
- Consider Permanent Elastic in front

Long term

- Refine foot-lift model / report
- Read Adam's email and discuss
- Type questions for Dr.D
- Notes
- Type report about # of steps based on research

Meeting Notes:

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| Week 11 Performance | |
|---|---|
| **+ (sustain)** | **Δ (opportunities)** |
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| | |

| Action Items | | | | | |
|---|---|---|---|---|---|
| **Item #** | **Description** | **Responsible** | **Due Date** | **Close Date** | **Comments** |
| A001 | Consider Permanent Elastic in front | Noah & Tyler | 11/11 | | By DDR |
| A002 | Refine foot-lift model with angles | Noah | 11/11 | | By DDR |
| A003 | Consider not using a quick connect | Noah & Tyler | - | | Gate Review |
| A004 | BOM: add columns (vendor/shipping) | Geni | 11/11 | | By DDR (long term) |
| A005 | Look into downsizing electrical side | Megan | 11/11 | | By DDR (long term) |
| A006 | Add music to videos | Noah | - | | (optional : ) |
| A007 | Color correlation on the M-opt plot | Noah | 11/11 | | Make EGDE clearer |
| A008 | Engineering metric for foot attachment | Geni | 11/11 | | Need to quantify things |
| A009 | Ask Dr. C about compression sleeves | Geni & Jared | 11/11 | | Nazareth clinic |
| A010 | Tweak/update sketched | Geni | 11/11 | | GAD models |
| A011 | Color code the risk table with changes | Tyler | 11/11 | | Expect likelihood changes |
| A012 | Test strain of fishing line | Noah | 11/11 | | Hang weights on the line |
| A013 | Increase severity of fishing line risk | Tyler | 11/11 | | See other strain risk |
| A014 | Move pressure alert priority down | Megan | 11/11 | | On prioritized task list |

| Issues | | | | | |
|---|---|---|---|---|---|
| **Item #** | **Description** | **Responsible** | **Open Date** | **Close Date** | **Comments** |
| I001 | The AFO could be slippery with socks | Geni | 10/23 | | Relates to A009 |

| Decisions | | | | |
|---|---|---|---|---|
| **Item #** | **Description** | **Contributing Individuals** | **Decision Date** | **Comments** |
| D001 | Testing comfort with different users | Geni - Tyler | 10/23 | This is an ongoing resolution |
| D002 | Bring Upper-Lower attachment prototype | Geni - Tyler | 10/23 | Decided as goal for DDR |

**Week 9: Rubric**
**Deliverables (quantity & quality)**
Phase-specific deliverables:
- Design output (see examples)
- Risk assessment, mitigation plans & triggers
- Test plan (updated)
- Preliminary Detailed Design Review (80%)

Example design output:
- ME: Drawing package (incl. part and assembly drawings, fasteners, and manufacturing processes identified), mechanical simulations, LabView algorithms
- EE / CE: final schematics and parts list, detailed SPICE, Matlab simulations, development tools. For software: UML/use cases, algorithms, state diagrams, AD/DA mapping for controllers, etc.
- ISE: factory layout, process flow diagrams, workflow maps, supply chain maps, ergonomic drawings, lean implementation plan, inventory management plan.
- BOM complete: vendor identified for long lead-time parts, make-buy (or design-buy) decisions clarified, review against budget
- Simulation models

**Process**

"- Use of phase-specific tools => outcomes: breadth of tools used, execution, analysis, iteration
- Customer is appropriately engaged
- Requirements flow-down: customer => system => subsystems => components => tests
- Requirements traceability: tests => components => subsystems => system => customer
- Revisit analyses
- Problem solving & risk assessment
- Project planning and tracking
- Use of feedback
- Team functioning
- Documentation

- Execution of review"

**Contribution to Team**

Quantity & quality of results, adherence to team norms and values, peer reviews, professional behavior, effective communication, use of feedback, project planning and tracking, logbook and other documentation