**MECH 328 Weekly Progress Report *Dates: Oct 6 - Oct 20***

Group: 10 Project Title: TrailRider 5.0

**Last Week’s Goals**:

1. Complete scoring of our four full concepts in the WDM
2. CSR Presentation
3. Begin Optimization and DFMEA 1

**Last Week’s Activities**:

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Activities | Hours Worked | |
| Last Week | Total |
| Andrea | * Presented ‘Project Management’ during CSR * Organized/labelled concepts for presenting * Started DFMEA | 8 | 41 |
| Carson | * Completed WDM evaluation * Presented ‘Concept Evaluation’ during CSR * Began detailed design by laying out important trade-offs | 8 | 41 |
| Julia | * Drew concept B.2 in full detail for CSR * Presented ‘Concept Generation’ during CSR * Began sourcing major components for device | 8 | 41 |
| Lukas | * Completed WDM evaluation * Presented ‘Project Scope and Target Specs’ during CSR | 8 | 41 |
| Ratthamnoon | * Wrote full concept descriptions for CSR * Presented ‘Project Needs’ during CSR * Began detail design and optimization by researching appropriate methods | 8 | 41 |
| Stephen | * Presented ‘Function Decomposition’ during CSR * Started on DFMEA | 8 | 41 |

**Summary of progress**:

* WDM evaluations are complete and concept B.1 was selected to proceed
* All CSR material prepared and team presented successfully at CSR
* Began DFMEA 1
* Began researching design considerations for upcoming analysis and calculations
* Began general SOLIDWORKS model of general components (i.e frame)

**Assessment of Overall Progress:**

* Meetings have been cut by 2 hours this week, since we worked overtime up until now.
* DFMEA 1 will be finished next week
* Calculations and stress analysis will occur simultaneously while outsourcing components
* We are slightly behind schedule if we want to meet our “mock report” deadline. We are considering meeting up next Friday to make up for necessary work. However, we are on track for the actual report deadline.
* General CAD of Trailrider will be an ongoing project until 08/11/19

**Goals for Next Week**:

1. Determine governing equations for analysis of components to be input to MATLAB
2. Create excel sheet with a range of outsourced components including costs
3. Begin MATLAB optimization of the selected range of key components
4. Finish DFMEA 1 and begin DFMEA 2

**Action Items for Next Week**:

|  |  |  |
| --- | --- | --- |
| Name | Action(s) | Due Date(s) |
| Carson, Julia | Determine key equations for analysis of key component candidates | 10/21 |
| All | Outsource list of key components from McMaster (or similar) for further evaluation/selection | 10/25 |
| Friend | Perform optimization on MATLAB to determine final outsourced components | 10/28 |
| Stephen, Andrea | Complete DFMEA 1 and begin DFMEA 2 | 10/23 |