

Shared Vision 3 Week

- Proof of Concept (POC): Motor/Wheel Assembly
 - Who: Alex Hebert
 - What:
 - Evaluation of current solution
 - Redesign
 - Why:
 - Current solution may not be feasible/easy to assemble.
 - Try to improve ease of assembly/make interface with existing stander easier to do.
 - How:
 - Concept generation
 - Concept selection
 - Risk assessment
 - Feasibility analysis
 - When:
- POC: Main system Housing/Packaging
 - Who: Emily Courtney
 - What:
 - Develop ideal way to house electrical components on stander
 - Why:
 - Need to develop a more professional and marketable overall appearance
 - Need to weather and child proof stander
 - How:
 - Concept generation and comparison
 - Teardown other component storage solutions (i.e. desktop computer, wheelchair battery and controls case)
 - Create physical model to “dry fit” to stander - determine ideal size and mounting location
 - FEA model of design
 - When:
 - Teardown - 9/26
 - Physical Model - 10/3
 - FEA model - TBD
- POC: Controls Mounting/Packaging
 - Who: Greg Roeth
 - What:
 - Evaluation of current solution and other solutions on standers
 - Proposal for designs based on evaluation
 - Why:

- improve upon existing stander
 - customer requirements
- How:
 - Concept generation/selection
 - Risk assessment
 - Feasibility analysis
 - Power Power Build/Distribution
- When:

Date	Action Items to complete
9/20/2013	Concept generation/selection
9/21/2013	
9/22/2013	
9/23/2013	Risk assessment
9/24/2013	
9/25/2013	
9/26/2013	Feasibility analysis
9/27/2013	
9/28/2013	Power Point Build/ Distribution
9/29/2013	
9/30/2013	
10/1/2013	Systems Design Review

- POC: Main System Hardware
 - Who: John
 - What: Choose a mainboard or processor family
 - How:
 - What processor Family
 - How big is the code, if its comparable to last years
 - What IDE, what language.
 - What are the main peripherals it talks to, how will it talk to them.
 - When:
- POC: Input Controls Hardware
 - Who: Martha V.
 - What:
 - Develop a Pugh Concept Selection for a variety of input control options.
 - Compare and contrast options based on P13045's design.
 - Assure compatibility between selected parts and main system selection.
 - Define what parameters are dependent on user/main system and which are independent (allowing for modular design).

- When:

ID	Task Name	Start	Finish	Duration	2013														
					Sep 2013										Oct 2013				
					20	21	22	23	24	25	26	27	28	29	30	1	2	3	
1	Concept Generation / Selection (Pugh Chart)	9/20/2013	9/23/2013	2d															
2	Comparison with P13045's Design	9/23/2013	9/26/2013	4d															
3	Compatibility & Feasibility Analysis	9/25/2013	9/27/2013	3d															
4	Parameter Definition and Power Point Contribution	9/27/2013	9/30/2013	2d															
5	Systems Design Review	10/1/2013	10/1/2013	1d															

- Why:

- Modular input control capability is a vital additional component for customer satisfaction as defined in the customer requirements.
- Safety concerns targeting specific issues that CP patients may find helpful in assisted travel mechanisms.
- Easing the selection of most feasible input control development given our time and resource restrictions.

- How:

- Ask customer for ideal listing of what inputs are most desirable for customer satisfaction.
- Take notes on previous model setup and connections to develop a model of “Old System Architecture and Design” document.
- Work together with John D. to assure consistency with Main System Hardware and develop “New System Architecture and Design” document.
- Elaborate on functional decomposition of said architecture.

- All Documents Shown

- Feasibility
- Concept Generation
- Concept selection
- Functional Decomposition
- Risk Assessment