

ID	Phase	Activity	Description	Deliverables/Checkpoints	Duration (Days)	People	Resources	Predecessors
1		Fall 2020						
1.1	1	Meet with Sponsor	Meet with the sponsor	<ul style="list-style-type: none"> Sponsor Meet and Greet Form Submit Form 	1	<ul style="list-style-type: none"> Emil (1) Asher (2) Jonathan (3) Gabriel (4) Kyle (4) 		
1.2	1	Meet with Advisor	Meet with the team advisor	<ul style="list-style-type: none"> Advisor Meet and Greet Form Submit Form 	1	<ul style="list-style-type: none"> Emil (1) Asher (2) Jonathan (3) Kyle (3) Gabriel (4) 		
1.3	1	Meet with Customer	Meet with the customer	<ul style="list-style-type: none"> Obtain the needs of the customer 	5	<ul style="list-style-type: none"> Emil (1) Asher (2) Jonathan (3) Gabriel (4) Kyle (4) 		
1.4	1	Project Charter	Define Project Scope; write, review, and sign Code of Conduct	<ul style="list-style-type: none"> Review project proposal Revise Code of Conduct Acquire team member signatures Code of Conduct Finalize Project Scope Submit charter 	5	<ul style="list-style-type: none"> Asher (1) Jonathan (2) Emil (2) Kyle (2) Gabriel (2) 	<ul style="list-style-type: none"> Notes from Customer, Advisor, and Sponsor meetings Project proposal 	1.1 - 1.3
1.5	1	Customer Needs	Define and summarize the customer's needs and requirements for the project, questions and answers delivered toward customer, and determine how needs should be turned into project specifications	<ul style="list-style-type: none"> Get customer needs from meeting notes Derive needs from notes Derive requirements from needs Customer needs and project requirements Submit documentation 	5	<ul style="list-style-type: none"> Emil (1) Asher (2) 	<ul style="list-style-type: none"> Notes from Customer Meeting 	1.3
1.6	1	Functional Decomposition	Break down the functions and prototype specifications; how the product will perform	<ul style="list-style-type: none"> Observe project requirements Derive the functions and subfunctions of requirements Functional decomposition Submit decomposition 	8	<ul style="list-style-type: none"> Emil (1) Gabriel (2) Kyle (2) Asher (3) Jonathan (3) 	<ul style="list-style-type: none"> Customer Needs 	1.5
1.7	1	Work Breakdown Structure	Break down tasks needed to complete project in a detailed and structured fashion	<ul style="list-style-type: none"> Observe all the deliverables for the project Describe, breakdown, and assign the deliverables Work Break Down Structure Submit WBS 	5	<ul style="list-style-type: none"> Jonathan (1) Asher (1) Kyle (2) 		
1.8	1	VDR1 (Revision 1)	Virtual Design Review: introduction, project summary, background, scope, needs, and functional decomposition	<ul style="list-style-type: none"> Assemble the project background, scope, needs, and functional decomposition into a presentation Practice presenting the slides Submit presentation slides 	13	<ul style="list-style-type: none"> Asher (1) Kyle (2) Emil (3) Gabriel (3) Jonathan (3) 	<ul style="list-style-type: none"> Project proposal Project scope Customer needs Functional decomposition 	1.4 - 1.6
1.9	1	VDR1 (Revision 2)	After receiving feedback on VDR1 resubmit presentation	<ul style="list-style-type: none"> Revise the presentation slides First presentation Submit revised presentation slides 	3	<ul style="list-style-type: none"> Asher (1) Kyle (2) Emil (3) Gabriel (3) Jonathan (3) 	<ul style="list-style-type: none"> Project proposal Project scope Customer needs Functional decomposition 	1.8
1.10	2	Targets / Metric	Declare the benchmarks for the project requirements	<ul style="list-style-type: none"> Observe functions from Functional Decomposition Benchmark projects with targets for all functions Create large spread for appendix Project Targets Submit Targets 	8	<ul style="list-style-type: none"> Kyle (1) Gabriel (2) Jonathan (3) Asher (3) Emil (3) 	<ul style="list-style-type: none"> Customer needs and requirements 	1.5
1.11	2	Concept Generation	Brainstorm concepts for the project design, from conservative to wild, and refine them	<ul style="list-style-type: none"> Generate concepts for the project to take on 100 concepts generated Concept Generation Submit Concept Generation 	8	<ul style="list-style-type: none"> Gabriel (1) Kyle (2) Emil (2) Asher (3) Jonathan (3) 	<ul style="list-style-type: none"> Project scope Customer needs and requirements Functional decomposition 	1.5
1.12	2	Concept Selection	Choose one concept from Concept Generation for the project design	<ul style="list-style-type: none"> Using engineering decision making, select one concept Concept Selection Submit Concept Selection 	13	<ul style="list-style-type: none"> Asher (1) Emil (2) Gabriel (3) Kyle (3) Jonathan (3) 	<ul style="list-style-type: none"> Concept generation 	1.11
1.13	2	VDR2	Virtual Design Review 2: Targets, concept generation, and concept selection	<ul style="list-style-type: none"> Assemble the targets, concept generation, and selection into a presentation Practice presenting the slides Second presentation Submit presentation slides 	13	<ul style="list-style-type: none"> Jonathan (1) Gabriel (2) Kyle (2) Emil (3) Asher (3) 	<ul style="list-style-type: none"> Targets Concept generation Concept selection 	1.10 - 1.12
1.14	3	Bill of Materials	Create a list of materials needed for the design and concept chosen	<ul style="list-style-type: none"> Derive the materials needed Select the materials needed Determine the cost of all the materials Bill of Materials Submit Bill of Materials 	8	<ul style="list-style-type: none"> Gabriel (1) Jonathan (2) 	<ul style="list-style-type: none"> Customer needs and requirements Concept selection 	1.12
1.15	3	Risk Assessment	Complete form that entails what can go wrong, with a primary focus on safety and personnel	<ul style="list-style-type: none"> Observe the risks the project may cause to the members Record the risks observed Risk assessment Submit risk assessment 	8	<ul style="list-style-type: none"> Kyle (1) Gabriel (2) Jonathan (3) Asher (3) Emil (3) 	<ul style="list-style-type: none"> Project proposal 	
1.16	3	Spring Project Plan	Plan for Spring 2021 execution and future endeavours	<ul style="list-style-type: none"> Observe the concept selected and functional decomposition Construct a plan for the semester Revisit the work break down structure for the spring Spring Project Plan Submit Spring plan 	13	<ul style="list-style-type: none"> Asher (1) Emil (2) Gabriel (2) Kyle (2) Jonathan (2) 	<ul style="list-style-type: none"> Functional Decomposition Concept Selection 	
1.17	3	VDR3 (Poster)	Virtual Design Review 3: A poster of all project elements and future endeavours	<ul style="list-style-type: none"> Assemble all the project elements Create a display poster of the elements for public viewing Design Poster 	21	<ul style="list-style-type: none"> Kyle (1) Jonathan (2) Emil (3) Asher (3) Gabriel (3) 	<ul style="list-style-type: none"> VDR1 VDR2 Bill of Materials Risk Assessment Spring Project Plan 	1.8 1.13 - 1.16