FAMU/FSU College of Engineering

Department of Electrical and Computer Engineering

<u>Work Breakdown Structure</u>

Team 303 Software Defined Radio

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Evidence book
1. Customer needs
   1.1 Speak with sponsor
   1.2 Team discussion
   1.3 Write the document
   1.4 Proofread and revise
2. Functional decomposition
   2.1 Define overall function
   2.2 Create sub-functions
   2.3 Assign each member function(s)
   2.4
3. Targets
   3.1 List of targets
   3.2 Justification
   3.3 Method of validation
4. Virtual design review 1
   4.1 Create a draft VDR
   4.2 Perform "mock" presentation
   4.3 Make revisions to VDR based on feedback
5. Concept generation
   5.1 Generate concepts
   5.2 Select concepts
6. Final demo
   6.1 Learn software
   6.2 Acquire components
   6.3 Program components
   6.4 Build
   6.5 Test
   6.6 Make adjustments
   6.7 Write final report

Ref. Number	Task Name	Task Description	Deliverables/ Checkpoints	Duration	People	Resources Needed	Dependencies
1	Customer Needs	Ask and interpret needs of product	Meeting Minutes	09/20/20 - 09/25/20	Kira Bronstein	Sponsor	Meeting with the sponsor
1.1	Speak with sponsor	Ask questions	Sponsor Meet and Greet	09/20/20	Kira Bronstein, Evan Woodard, and Christain Pollock	Sponsor	Meeting with the sponsor
1.2	Team discussion	Interpret needs	Meeting Minutes	09/23/20	Everyone	Team members	Meet with the sponsor
1.3	Write the document	List steps to get needs and interpret	Completed customer needs form.	09/23/20	Christain Pollock	Notes from prior meetings	Finish customer need and meeting with sponsor
1.4	Proofread and revise	General overview of Project	Project Plan	09/23/20	Kira Bronstein	Notes from Meeting and Sponsor	A finished document with customers need and a brief introduction of the project
2	Functional Decomposition	Define functions of project	Turn in Functional Decomposition	09/25/20	Jaryd Walton	Advisers	Meeting with sponsor and understand the project
2.1	Define overall function	Define overall function	Completed functions	9/22/20 - 9/24/20	Everyone	Advisers and material from last year project	Overview of the project
2.2	Create Sub-functions	Create Sub-functions	Completed sub-functions	9/23/2 - 9/24/20	Evan Woodard	Project members	Have main functions completed
2.3	Assign each member function(s)	Assign Tasks to group members	Tasks assigned	9/24/20 - 9/25/20	Kira Bronstein	Project members and Advisers help	Have a final sub function
3	Targets	What the Board needs to do	Key requirements/ needs	9/25/20 - 10/02/20	Everyone	Customer needs	Create a list of targets based on customer needs
3.1	Lists of targets	Create Goals	List of requirements/ needs	9/26/20 - 9/28/20	Evan Woodard,	Customer needs	Have a final list of targets and verify it with sponsor

3.2	Justification	What steps team members are going to take to complete the project	Overview of tasks to complete	9/28/20 - 9/30/20	Kira Bronstein	High fidelity concepts	Have the high fidelity concepts finished
3.3	Method of Validation	List of testing methods	Turn in Targets document	9/30/20 - 10/02/20	Simon Charry	Testing methods	Talk to sponsor on different method of testing
4	Virtual design review 1	Introduce the project to class and stakeholders	VDR1 presentation	10/02/20 - 10/09/20	Everyone	Project members and adviser	Have a final list of targets, justification, and method of validation
4.1	Create a draft VDR	Create a draft	Written VDR draft	10/02/20 - 10/04/20	Everyone	targets, justification, method of validation, and customers needs	Have a final list of targets, justification, and method of validation
4.2	Perform "Mock" presentation	Practice draft presentation	Perform "Mock" presentation	10/04/20 - 10/06/20	Everyone	Project members, sponsor, and reviewers	Have a draft presentation
4.3	Make Revisions to VDR based on feedback	Make adjustment from presentation	Turn in VDR1	10/06/20 - 10/09/20	Everyone	Stakeholders, Class, Project members, Sponsor, and reiwers	Have a the final VDR to present
5	Concept Generation	Create concepts	Completed concepts	10/16/20 - 01/9/21	Christian & Jaryd	Team members	Come up with concepts that can be used
5.1	Generate Concepts	Create schematic and program	Turn in Concept Generation	10/19/20	Evan and Christain	List of concepts	Have the final list of concepts
5.2	Select components	Research component	Components selected.	10/30/20	Simon & Christian	Schematic outline	List of component
6	Final	Complete Project	Final Product prototype	01/6/21- 04/24/21	Everyone	Have the project completed	Testing completed
6.1	Learn Software	Learn Software	Download the software	11/5/20- 01/14/21	Jaryd & Kira	Team members having the software	Know what software we are going to be using for

						download	the project
6.2	Acquire components	Buy components	Components acquired.	02/19/21 - 03/05/21	Jaryd Walton	Digikey, Ti, and mouser.	Have a final list of components that need to be ordered
6.3	Program components	Program components	Finish programing the components	01/17/21 - 02/06/21	Jaryd & Kira	Component that need to be programed	Have the required components
6.4	Build	Build the PCB	Finished PCB	03/08/21 - 03/19/21	Simon Charry	PCB, components, and solder	All of the components have arrived and are tested
6.5	Test	Make sure the Board is working	Working board	03/20/21 - 04/05/21	Simon Charry	PCB with component soldered in	Finish building the PCB with all of the component soldered
6.6	Make Adjustments	Fix anything that is wrong with the board	Final Product	04/05/21 - 04/12/21	Simon Charry	Final PCB with component soldered in	Finish testing the PCB
6.7	Write final report	Put together evidence book and report	Turn in final report	04/23/21	Everyone	Previous assignments and project completed	All documents are completed