1.12 Weekly Status Report for Software Defined Radio

September 26, 2018   Submitted by: James Bell

Faculty Advisor: Dr. Stapleton

Sponsor: Texas State University

<u>Team Members:</u>
James Bell [PM]
Samuel Hussey
Zachary Schneiderman

`Green` Current Project Status

We have submitted the statement of work and are now starting on our individual tasks as assigned in the action items.

Activities/Accomplishments this week

Team Member	Description
James Bell	Downloaded, compiled, and began testing the Arduino environment.
Samuel Hussey	Continued progress on working schematic in LTSpice and began testing amplifiers
Zachary Schneiderman	Tried reading about quadrature audio, more complicated than thought

Problems Encountered

Severity	Description
High	Not sure how to model/replace Teensy or audio board in LTSpice in order to finish working model.
Med	.
Low	.

Activities planned for next week

Team Member	Description
James Bell	Begin reviewing the code provided and start working on implementing it in the Arduino coding environment.
Samuel Hussey	Finish all diagrams and have specific components in place.
Zachary Schneiderman	Begin work on the parts list, ideally finish it

Upcoming Course Deliverables (next 2 to 3 weeks)

Deliverable	Due Date	Status
SOW	9/24/2018	Completed
Functional Specifications	10/15/18	In Progress

Sponsor and Faculty Advisor Meetings Held/Planned

Who	Date	Topic(s)
Dr. Aslan	Wednesdays, 8:20am	Weekly Meeting and discussion on project.

1.12 Software Defined Radio Open Action Items

9/26/2018 Last Update

Date	Description	DRI	Due By	#D	Notes / Comments
9/12/2018	Organizing, and commenting pre-existing code for Prototype	James Bell	10/18/2018	22	Currently working on getting the enviorment working
9/12/2018	Schematics for Prototype in multi-sim or other such software	Samuel Hussey	10/18/2018	22	Reviewing options for simulations
9/12/2018	List of components in Prototype priced and deliver estimates	Zachary Schneiderm;	10/18/2018	22	Compiling list
8/31/2018	Watch and take notes of videos for SDR Prototype	James Bell	9/14/2018	-	CLOSED: Done on 9/14/2018.
8/31/2018	Watch and take notes of videos for SDR Prototype	Samual Hussy	9/14/2018	-	CLOSED: Done on 9/14/2018.
8/31/2018	Watch and take notes of videos for SDR Prototype	Zachary Schneiderm;	9/14/2018	-	CLOSED: Done on 9/14/2018.

# items	Team Member
1	James Bell
1	Samual Hussy
1	Zachary Schneiderman

1.12 Software Defined Radio Milestone Schedule

9/26/2018	Last Update				
72	calendar days until Senior Design Day				

DRI	Task	Dur	Start	End	Status
Samuel Hussey	Statement Of Work (Executive Summary)	24	8/31/2018	9/24/2018	Finished
Zachary Schneiderman	Statement Of Work (Buisness Need)	24	8/31/2018	9/24/2018	Finished
James Bell	Statement Of Work (Product Scope Description)	24	8/31/2018	9/24/2018	Finished
Zachary Schneiderman	Statement Of Work (Project Scope Description)	24	8/31/2018	9/24/2018	Finished
Samuel Hussey	Statement Of Work (Sponser Support Elements	24	8/31/2018	9/24/2018	Finished
James Bell	Statement Of Work (Aprovals Signature)	24	8/31/2018	9/24/2018	Finished
James Bell	Watch and take notes on Videos of SDR	14	8/31/2018	9/14/2018	Finished
Zachary Schneiderman	Watch and take notes on Videos of SDR	14	8/31/2018	9/14/2018	Finished
Samuel Hussey	Watch and take notes on Videos of SDR	14	8/31/2018	9/14/2018	Finished
Zachary Schneiderman	List of components in Prototype priced and del	36	9/12/2018	10/18/2018	In progress
Samuel Hussey	Schematics for Prototype in multi-sim or other	36	9/12/2018	10/18/2018	In progress
James Bell	Organizing, and commenting pre-existing code	36	9/12/2018	10/18/2018	In progress
James	Signed Spec Sheet	26	10/10/2018	11/5/2018	Not Started
	Begin RF Amplifier	26	10/10/2018	11/5/2018	Not Started
	Begin Power Amp	26	10/10/2018	11/5/2018	Not Started
	Begin Bandpass Filter	26	10/10/2018	11/5/2018	Not Started
James	Labor Cost Schedule	14	11/5/2018	11/19/2018	Not Started
James	Poster Draft	21	11/5/2018	11/26/2018	Not Started
	Test/Benchmark Circuits	14	11/5/2018	11/19/2018	Not Started
	Develop Passthrough Tests	14	11/5/2018	11/19/2018	Not Started
	Create Quadrature Converter	21	11/5/2018	11/26/2018	Not Started
James	Test Plan	11	11/19/2018	11/30/2018	Not Started
	Configure LCD/Tuner Knob	13	11/19/2018	12/2/2018	Not Started
	Implement RF Receive Code	7	11/19/2018	11/26/2018	Not Started
	Thanksgiving Break	4	11/21/2018	11/25/2018	Not Started
	Receive/Tune tests	9	11/26/2018	12/5/2018	Not Started
	Receive/Tune tests	9	11/26/2018	12/5/2018	Not Started
	Print Poster, Finalize Display	16	11/12/2018	11/28/2018	Not Started
	Transmitting/Tune tests	9	11/26/2018	12/5/2018	Not Started
	Senior Design Day	0	12/7/2018	12/7/2018	Not Started
	Final Preparations for Senior design day	2	12/5/2018	12/7/2018	Not Started
	Add licensing selection to radio	28	1/22/2019	2/19/2019	Not Started
	Raspberry Pi implementation	41	1/22/2019	3/4/2019	Not Started
	Custom PCB	41	1/22/2019	3/4/2019	Not Started
	Higher Power Amplifier	21	2/19/2019	3/12/2019	Not Started
	Alternate Power Sources	21	2/19/2019	3/12/2019	Not Started
	Custom Cases	28	3/12/2019	4/9/2019	Not Started
	Head phone output jack	27	4/9/2019	5/6/2019	Not Started
	Finalize Poster	0			Not Started
	Print Poster, Finalize Display	0			Not Started
	Senior Design Day				Not Started