EE/CprE/SE 491 WEEKLY REPORT

Start Date - End Date

Group number: 20

Project title: mm Wave Imaging radar

Client &/Advisor: Mohammed Tayeb Al Qaseer

Team Members/Role: Nathan Ayers: Interface Lead, Rodrigo Romero: Lead FPGA Programming Engineer, Michael Levin: Lead DSP Engineer, Matthew Caron: Lead Hardware Designer.

(All the above information should be there in each weekly report. The format/color scheme etc need not be the same. However, please remove everything that is in a bracket from your final submission. These are just part of the template and need not be a part of the report.)

O Weekly Summary

This week was focused on organizing our group and laying out what this semester will look like. The team contract allowed us to figure out the best method for us to make progress and work together. We also used the in class activity to empathize with our client. This will hopefully guide our decisions when considering the user interface on our final device.

o Past week accomplishments

- Nathan Ayers: More research on user interface, similar to last weeks activities. Spent meeting time with Michael and Rodrigo laying out our team charter/contract
- Rodrigo Romero: Watched videos about FPGA and SPI. Contributed to fill out the Team contract.
- Michael Levin: Helping to complete the team charter and continuing to research vivado.
- Matthew Caron: Specked out DAC and ADCs for the PCB and worked a little more on schematic design
- o <u>Pending issues</u> (If applicable: Were there any unexpected complications? Please elaborate.)
 - Nathan Ayers: Unable to meet with our advisor due to weather issues on Thursday, this
 delays some of the questions that I was hoping to ask in person, but they are not too
 urgent.
 - Rodrigo Romero: I was having some health issues this past week so I could not be in my highest potential.

o <u>Individual contributions</u> (Creating this section is optional, but it is **Required to include the** "Hours Worked for the Week" and their "Total Cumulative Hours" for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.)

NAME	Individual Contributions	<u>Hours this</u>	<u>HOURS</u>
	(Quick list of contributions. This should be	<u>week</u>	<u>cumulative</u>
	short.)		
Michael	I organized the report and charter.	2	6
Levin			
Nathan	Worked on the charter, divided the work with Michael	2	6
Ayers	and Rodrigo, and research.		
Rodrigo	Learned about FPGA and SPI connection. Filled	3	7
i komero	out some sections on the team's contract. Contributed to develop the		
	worked on schematic	2	7
Caron			

o Comments and extended discussion (Optional)

Feel free to discuss non-technical issues related to your project.

- o <u>Plans for the upcoming week</u> (Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)
 - Nathan Ayers: I would like to setup the gitlab with some documentation, and determine
 if it feasible to have Rodrigo and Michael pushing their most up to date code to gitLab
 frequently.
 - Rodrigo Romero:
 - Michael Levin: I'm going to try and write some pseudo code for analyzing the digital signal being received.
 - Matthew Caron: Potentially finish up the schematic and work on layout of the PCB

Grading criteria

Each weekly report is worth 10 points. Scores will be awarded as follows:

- **8 10**: Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.
- 6 8: There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
- < 6: Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.

Each weekly report should be unique in that they have a unique set of supporting details for your contributions. So please do not just copy your reports from the previous week. In addition, please avoid any personal pronouns (he, she, I, you). Try to keep your reports as neat as possible.