

## **Past week accomplishments**

**Name:** DaZhawn Davis

**Time spent:** 6 (from 11/22 to 12/06)

**What I did this week:** Researched more about the Physical abstraction layer. About the math that is used to calculate 5g. Tried to figure out how we need to implement that into the code. How to get all the variables to work together and use that to emulate the speed and be able to keep it stable for a long period of time

**Plans for next week:** Try to implement these things and test the results

**Name:** Andrew Whitehead

**Time spent:** 7 (from 11/22 to 12/06)

**What I did this week:** Researched device to device communication algorithms and examples on how to conduct them on OAI, in order to get a head start on next semester's deliverables. Attempted to break down and take notes on each c file in the SIMULATION and PHY folders on the V0.5.2 version

**Plans for next week:** Continue taking notes on D2D implementation and run xml files from the repository

**Name:** Rohan Willis

**Time spent:** 6 (from 11/22 to 12/06)

**What I did this week:** This week I started my research on device to device communication and various examples of it. I also began reviewing signal modulation in matlab in preparation for next semester.

**Plans for next week:** I plan on working on a few more signal modulation examples and organizing my research on D2D communication, so that when we all return things are ready to go.

**Name:** Ousmane Liloyd Ntutume

**Time spent:** (from 11/22 to 12/06)

**What I did this week:** For this period I looked more into the PHY abstraction and the reason for it use. The results we have concluded that in order to reduce the complexity and duration of system level simulations we need to have an interface which replaces the actual link level computations and provides the higher layers with necessary and accurate link quality metric. Fortunately the PHY abstraction layer does exactly that by providing the same level of accuracy than the full PHY layer but with a faster time.

**Plans for next week:** For the following period I will focus more on the design document and finishing up the final presentation.

**Name:** Nolan Cardona

**Time spent:** 8 (from 11/22 to 12/06)

**What I did this week:** Finished working on the design document. Began to formulate a presentation for the group. Worked toward creating a Gantt chart for the following semester that will allow for the group to understand all of the time restraints for the remainder of the project. Learn ways in which the group will be able to improve for the following semester.

**Plans for next week:** Continue to perform more research over 5G as well as understanding the different layers associated with the entire system.

#### Individual contributions

Team Member	Contribution	Weekly hours	Total hours
DaZhawn Davis	- Understanding Math behind 5G interface	6	71
Andrew Whitehead	- Research Device to Device communication	7	64
Rohan Willis	- Research on D2D communication and signal modulation review.	7	62
Nolan Cardona	- Prepared for final presentation and design doc.	8	65
Ousmane Liyoy Ntutume	- PHY abstraction layer vs Full stack PHY layer	6	56