Past weeks accomplishments

Name: DaZhawn Davis

Time spent: 14 hours(02/10-02/24)

What I did this week: Tired to run simulations on my VM. Added a lot of print statements into every file to see what all is called when it goes through a simulation to help us better understand

what we need to implement to make the physical layer work in a newer version

Plans for next week: Continue to run simulation to find out how the physical layer works with the older branch to add into a newer branch. Add some of the newer code into v0.5.2 to see if I can get it to compile and maybe try a simulation

Name: Andrew Whitehead

Time spent: 15 hours (02/10-02/24)

What I did this week: Created a document with a compilation of differences between the files, both header and c, in the simulation folder of openair1 and the phy_interface folder on both versions 1.0.2 and 0.5.2. Read Chapter 24 of LTE_Advanced Pro and the Road to 5G, New 5G Radio Access Technology. Attempted to execute pieces of the code in the simulation folder of code using Git Bash but obtained errors pertaining to invalid methods.

Plans for next week: My plan for next week is to create a document with information on the 1.1.0 version of the code. Including functionalities, variable descriptions, and desired outputs. Finish reading LTE_Advanced Pro and the Road to 5G.

Name: Rohan Willis

Time spent: 12 hours (02/10-02/24)

What I did this week: Compared .c and .h files between v0.5.2 and v1.0.2 and determined the difference in functions called. Worked on the group computer and attempted to download the Rufus application onto it and a USB.

Plans for next week: Create a document listing the comparisons found in the .c and .h files that were compared. Work with DaZhawn on simulating the code on the laptop and finishing laptop configuration.

Name: Ousmane Lioyd Ntutume Time spent: 12 hours (02/10-02/24)

What I did this week: For the past 2 weeks I have been looking into the set up for broadcasting on millimeter waves. I found out that for 5G technology, the millimeter waves should be at frequencies from 30 to 300 Ghz, which will be around the same bandwidth used for satellites and radars. Due to the nature of these waves we found out that there is a real drawback, as they are easily absorbed by the infrastructures and cannot really travel long distances like radio waves did.

Plans for next week:

For the next 2 weeks I will look further into the other applications that have been developed with 5G technology.

Name: Nolan Cardona

Time spent: 14 hours (02/10-02/24)

What I did this week: This week, I continued reviewing the primitives tab of the open air interface code that is currently in our group repository. There were complications when it came to getting the needed hardware from the advisor of the project. In the time while I wait, I decided to attempt to execute the calls for each of the functions in the code to determine which of the newly called functions need to be executed in the previous revision of the code. Have began to work on the simulations that will provide me with the required information to test each of the function calls.

Plans for next week: My plan for next week is that I will be able to understand each of the functions that have been called and that are new when compared to the older revision of the code. I then will have to explain the functionality of each of these functions and begin to make determinations on how they can connect with the MAC/PHY layer of the simulator. This will again require me to run higher level simulations to determine the connection between files.

Individual contributions

Team Member	Contribution	Weekly hours	Total hours
DaZhawn Davis	 Tired to run simulation Added print statements into a lot of the files 	14	31
Andrew Whitehead	- Documentation creation containing compilation of differences between files of both versions, 1.0.2 and 0.5.2 Attempted execution of code through git bash	15	31
Rohan Willis	- Downloaded	12	28

	Rufus application onto group hardware		
Nolan Cardona	- Run simulations on the functions that are called in the primitives tab - Determine which of the functions are being called in the new version, as opposed to the old version	14	30
Ousmane Lioyd Ntutume	 Millimeter waves research 	12	29