

## **Past weeks accomplishments**

**Name:** DaZhawn Davis

**Time spent:** 12 hours(02/25-03/09)

**What I did this week:** Edited and added material to the powerpoint slides also recorded the video to go with the powerpoint. Looked more into how the SINR is being evaluated in the code. Also did some research on how the physical layer and how it is supposed to work. Research some of the commands built to OAI to help with running simulations.

**Plans for next week:** Continue to research how to improve physical layer and continue to add code into the newer version form v0.5.2

**Name:** Andrew Whitehead

**Time spent:** 13 hours (02/25-03/09)

**What I did this week:** Analyzed the mac\_phy\_primitives.c and mac\_phy\_primitives.h files in v1.1.0 and v0.5.2. Both files had the majority of the same code, methods, and pointers on them, however v0.5.2 had an additional section of code, attached below. It was established that the versions are compatible with one another and portions of the previous version's files could be used on the current version that we're looking at. Completed the "Technology Platforms" and "Functional Decomposition" slides on the Peer Evaluation presentation.

**Plans for next week:** Complete video recording. Run simulations to test whether the code from the older version can be directly applied to v1.1.0.

**Name:** Rohan Willis

**Time spent:** 12 hours (02/25-03/09)

**What I did this week:** Reviewed overall material for the project to create our powerpoint presentation. Worked on the 5G information, importance of 5G and overall project slides for our report. Started a document comparing the .c and .h files compared between v0.5.2 and v1.1.0

**Plans for next week:** Work more in depth with the code and finalize the document comparing the .c and .h files between the two versions of code. Complete the video recording and powerpoint presentation for our group.

**Name:** Ousmane Liloyd Ntutume

**Time spent:** 12 hours (02/25-03/09)

**What I did this week:** Worked on the powerpoint presentation for our project evaluation. Worked a little on the video presentation for the project evaluation. Worked on Beam forming management, specifically on the two main processes: Sweeping (It refers to covering a spatial area with a set of beams transmitted and received according to pre-specified intervals and directions), and measurement (It refers to evaluation of the quality of the received signal at the gNB or at the UE. Different metrics could be used such as RSRP, RSRQ and SINR or SNR for this purpose)

**Plans for next week:**

Work on the protocol stack of the PHY abstraction layer and work on the basic simulator.

**Name:** Nolan Cardona

**Time spent:** 12 hours (02/25-03/09)

**What I did this week:** Worked with each of my group members to assemble the powerpoint that will be used to present for the peer-review video. We needed to make sure that the presentation was up to date and that it will provide our audience with extensive information over the scope of our project. Troubleshooted and debug the virtual machine after I had encountered problems with the running of the basic simulator.

**Plans for next week:** Plan to work on running the basic simulator to search for the recommended tags that will be used to help compare the different versions of the code that we are currently using. This will require the successful compilation of the simulator with the most up to date version of the code.

## Individual contributions

| Team Member      | Contribution  | Weekly hours | Total hours |
|------------------|---|--------------|-------------|
| DaZhawn Davis    | <ul style="list-style-type: none"> <li>- Tired to run simulation</li> <li>- Added print statements into a lot of the files</li> </ul>   | 12           | 43          |
| Andrew Whitehead | <ul style="list-style-type: none"> <li>- Analyzed the mac_phy_primitives.c and mac_phy_primitives.h files in v1.1.0 and v0.5.2</li> <li>- Execution of versions 0.5.2 and 1.1.0 simulations through git bash</li> </ul> | 13           | 44          |
| Rohan Willis     | <ul style="list-style-type: none"> <li>- Worked on the powerpoint</li> <li>- Worked on completing</li> </ul>  | 12           | 40          |

|                       |  |    |    |
|-----------------------|--|----|----|
|                       | document comparing the two versions of code  |    |    |
| Nolan Cardona         | <ul style="list-style-type: none"> <li>- Worked with the group to generate the powerpoint for peer-review video</li> <li>- Continued working on debugging linux machine to run code</li> </ul> | 12 | 42 |
| Ousmane Liyod Ntutume | <ul style="list-style-type: none"> <li>- Work on the powerpoint</li> <li>- Worked on beam forming management</li> </ul>  | 12 | 41 |