

WEEKLY REPORT and MEETING AGENDA

Report #: 1 Project Name: Open Source LiDAR
Date: 01.29.2022 Prepared by: Gaurav Bhalla and Paul Roy

Agenda for the weekly meeting

1. Ask about the budget for the capstone project.
2. Also, ask about the requirements for the LIDAR system (do we need to make the Lidar sensor module?).

Accomplishments during this period

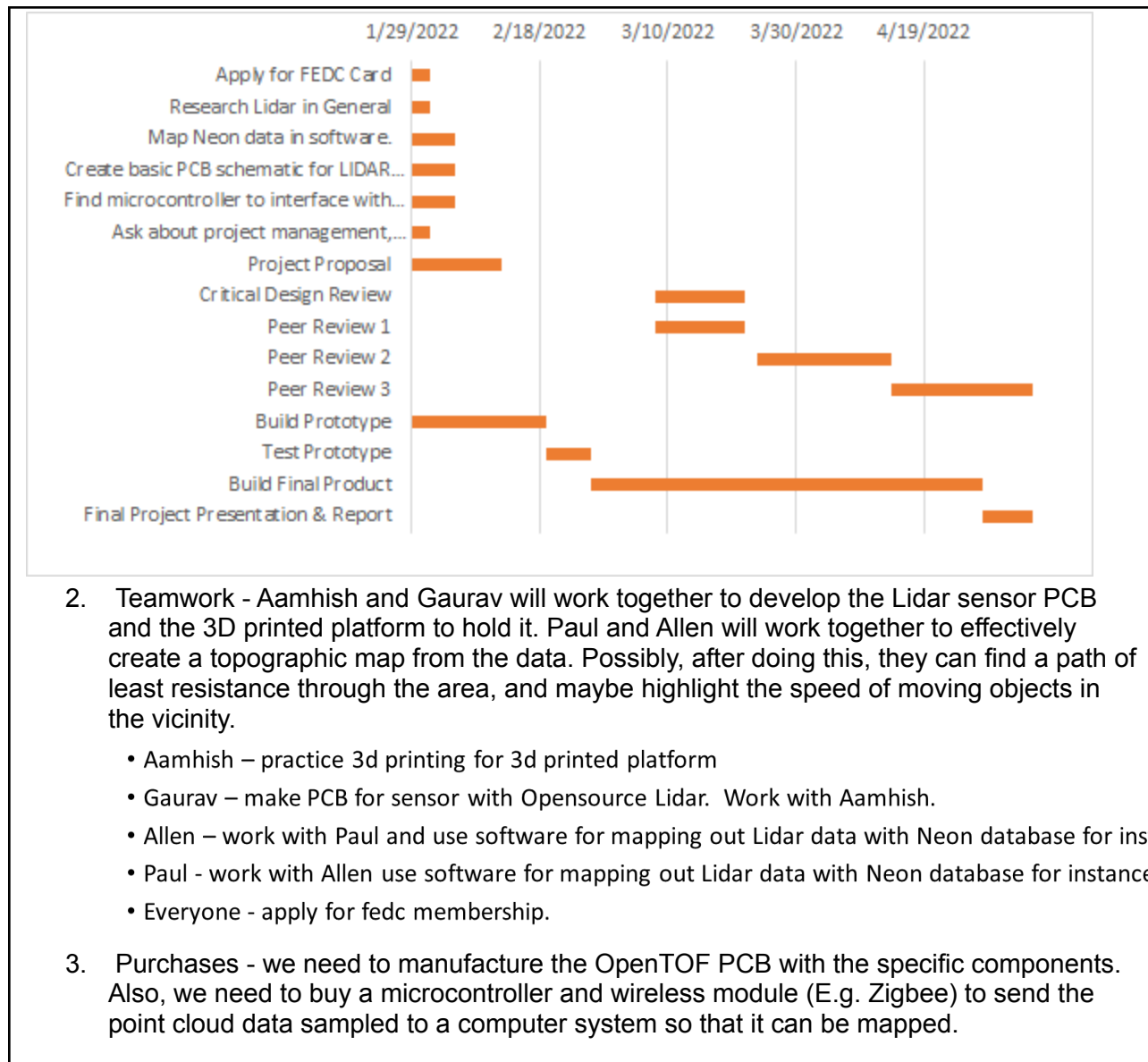
1. Most of the week was spent researching the principle of time of flight used in Lidar sensors. We now have a comprehensive understanding of what is expected of us regarding the project.
2. We created a basic plan of how to approach the project. We quickly identified several open source projects which we can use to springboard from and develop. We have also identified several parts including sensors, microcomputers and others to create our custom Lidar system.

Plans for next period

1. We have done some preliminary research on the material and have determined the best course of action is to continue preparing to build the Lidar sensor; asking questions regarding expectations, finance and other important features going forward.
2. Furthermore we have delegated the team into two halves. One section focusing on researching the hardware components in order to collect sensor data. While the other works on preparing for the software segment, by researching various programs and libraries which can be used to create a topographic map of the sensor data.
3. In the long-term we have decided to begin by creating the basic Lidar sensor, visualizing the data and then finally finding some application that we can use to add to the project.
4. Moreover, if we have time after meeting our long-term goal, we thought of having 3 sensors rotate in a spherical fashion to achieve a 3d topographic map of the local area.

Project management status

1. Schedule and milestones - We have weekly meetings for worksessions on Tuesdays 9-11 a.m in EABA 118. Then, we have update meetings with the professor and TA on 10:30 - 10:50 on Thursdays in EABA 118. Moreover, we have our update stand up meetings on Saturdays from 2 - 2:30 p.m through Zoom for writing weekly reports and preparation for the week's work session.



Minutes from previous meeting

This was our first meeting for the Open source Lidar capstone project, so there are no previous meeting notes.