The original design called for developing a system which was lightweight and would sense a user's heart rate and then send that data wirelessly to a separate display. We achieved this through the use of the MAX30102 system purchased from MAXIM integrated and the wireless aspect was done through the use of Bluetooth. Finally, the separate display was decided on to be an Android mobile phone display.

**Fall Term:**
First phase of development was researching what we needed to have and know to be able to develop this project as well as based on that research assigning roles to each member. After this, it was down to designing those different blocks to be able to achieve the specifications needed for our system. This phase was mostly done by December 2020.

**Winter Term:**
Second phase featured individual members working and researching more about how to accomplish the specifications needed for their block. This was all leading up to conducting verification and then check-off on those blocks.

**Spring Term:**
Third phase is what covers system integration where we take all the blocks each person worked on and start to combine them and see if they work together correctly and figuring out any bugs that arise from some blocks not meshing exactly correctly. This was all leading up to a final system check-off and also project closeout.
### Key Lessons

Some key lessons learned from this project is to never underestimate the difficulty of some parts of a project. Just because something seems easy to think about and conceptualize doesn’t always mean that it will be easy to implement. Another one would be to always keep the artifacts of whatever block you’re working on clean and understandable just so if you need to step away from the project the rest of your team or who ever takes your spot on the project can have an easier time catching up with what is done and needs to be done with the project.