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Technical Journal 4

Yesterday we had our first meeting with our project sponsors: the Haysville superintendent, Jeff Hirsh, and the temporary transportation director, BJ Knudsen. They did mention that there would be a new transportation director likely by January, so we will have to meet the new appointee at some point, but for now, these are our major points of contact.

While meeting with them, they gave us a few bits of information we did not know about. First, they both mentioned that there might be some legal issues with us attaching a GPS tracker to the school busses. They were going to talk to their legal team, but did mention that if it was a problem, they would be willing to buy our hardware so that it would be their GPS trackers on their busses, hopefully a work-around that is on the up and up. We still have to look in to see if that will actually work.

The second major piece of legal information they mentioned was the (possible) necessity of a contract. If we are going to have access to student information, we will need to set up some kind of contract to make sure that we are protecting the student’s data. There will again need to be research done to make sure that we can set up a fair and binding contract, although again, Mr. Hirsh was kind enough to offer to speak with his legal advisors on the subject.

It may not be necessary for us to have a contract, however. The team is still discussing, but one of the possibilities is to set up our system to be sold at a one-time cost to the district. In this way, they would simply purchase the necessary amount of hardware (depending on bus count) and rights to use the software, and then upload the student’s information onto their own server, making it so that we will never have access to the student’s information and will thus not be forced under contract related to said information. It is something we are talking about, but should be possible if we decide to go that route.

**Block Diagram**

Diagram

Description automatically generated

1. The School bus will have a GPS tracker/raspberry pi module that relays current location to the server.
2. The ADMIN account will have access to all currently running bus locations, as well as an option to send updates and announcements i) based on bus, and ii) to all PARENT users. These announcements will be sent to the server, which will relay the updates accordingly
3. The PARENT account will have access to a selected number of bus locations only
4. The server will handle all bus locations, expected arrival times, and other necessary functions.