

ALSET Challenges and Excellences

One of the biggest challenges the software development team faced during the development process of IoT HTL was the loss of the fourth member halfway through the process. Without the standardized four member team, the remaining three members had to split the now increased workload between themselves. It was difficult to meet the project specifications while maintaining other coursework and responsibilities. Both the document and software could have been improved with a fourth member throughout the project. Nevertheless, the combined skills and experiences of the remaining team members was sufficient to complete the projects to the best of their abilities.

The development team also specified a large number of features to be incorporated into the IoT HTL software, which were difficult to incorporate in the later stages of development. Choosing less features at the beginning of the development process and adding more features compatible with existing sensors after the simplified feature development process may have been a better approach. More features could also be added in a software update after the initial version of the software was released, but adding more features to the initial version is the more suitable alternative.

It was also difficult to implement fully autonomous features into the vehicle. None of the three members had any experience in software development or autonomous vehicles, so it was difficult to determine which features to implement. The majority of the IoT HTL features serve to assist the driver, but more features need to be added before the vehicle is entirely autonomous. A team with more experience regarding autonomous vehicles or vehicles in general would have been more successful in developing the best features for an autonomous vehicle.