

Submission Date	2019-09-10
Project Name	Automotive UI
Student Names	Kevin Lieng, Quyen Lu, Seung Min Song
Project repository	<a href="https://github.com/SeungMin-Song/Dashboard-Sensors">https://github.com/SeungMin-Song/Dashboard-Sensors</a>
SensorsEffectors	Speedometer(Hall effect sensor)(43237-2)
The database will store	RPM, speed, distance, elapse, multiplier values, location and basic medical information.
The mobile device functionality will	Get RPM, speed, distance, elapse, multiplier values, location, basic medical information.
I will be collaborating with the following company/department	Prof. Dennis Kappen
My group in the winter semester will	Kevin Lieng, Quyen Lu
50 word problem statement	Inefficient communication usually happens between paramedics and doctors. This is because the information has to go through a middle process (dispatcher) first in order to get to the doctors or nurses. This leads to not having enough preparation before the patient arrives.
100 words of background	In order to tackle the communication problems. By using those sensors during this project, the information may be processed faster than the traditional way. For instance, using some sensors to detect patient's status gives paramedics more initiative regarding to the current situation. Moreover, implementing GPS sensor for the vehicle and sending the current location through the mobile application assists doctors to get prepared for the circumstances.
Current product APA citation	Maserati. (n.d.). Ghibli. Retrieved from <a href="https://www.maserati.ca/ca/en/models/ghibli">https://www.maserati.ca/ca/en/models/ghibli</a>
Existing research IEEE paper APA citation	Kun, A. L., Boyle, L. N., Reimer, B., & Riener, A. (2013, April 18). AutomotiveUI: Interacting with Technology in Vehicles. Retrieved from <a href="https://ieeexplore.ieee.org/document/6504859">https://ieeexplore.ieee.org/document/6504859</a>
Brief description of planned purchases	Will purchase hall effect sensor module (It can be changed to another model sensor) and RaspberryPi.
Solution description	With the implementation of all the sensors and functionality of the mobile application. It would create the ease of information to be transferred each other in the medical field without the need of a middle process like the dispatcher. The paramedics would be able to communicate with the doctors more directly and allow for a more precise and accurate preparation for the patient arriving.