Submission Date	9/11/2018
Project Name	HapticMotorDrive
Student Name	Jordan Pulido
Project repository	https://github.com/JordanPulido/HapticMotorDrive
SensorEffector choice	DRV2605 Haptic Motor Driver
The database will store	The database will store a variety of virtual surfaces and objects.
The mobile device functionality will include	The mobile device functionality will include a buzzing and vibration feature.
I will be collaborating with the following company/department	Immersion Corporation (Haptic Company)
My group in the winter semester will include	Juan Rodriguez, Johnson Dinh
50 word problem statement	In virtual reality, when an object rubs or passes through a surface, the user is restricted to feeling the realism (texture, and friction) throughout the experience.
100 words of background	When a surface is being in contact with a certain object or tool, these objects can be determined by the roughness, hardness, and slipperiness. To capture these characteristics, a haptic surface will render the vibrations, rubbing behaviour, and stiffness. Throughout the rendering, the model is used to produce vibration signals and generate force. The haptic motor outputs buzzing sounds and vibrations depending on the contact of the surface.
Current product APA citation	Making Touch More Realistic: Advances in Haptic Technology Wendy B.- Intel - https://software.intel.com/en-us/blogs/2013/05/08/making-touch-more-realistic-advances-in-haptic-technology
Existing research IEEE paper APA citation	H. Culbertson and K. J. Kuchenbecker, "Importance of Matching Physical Friction, Hardness, and Texture in Creating Realistic Haptic Virtual Surfaces," in IEEE Transactions on Haptics, vol. 10, no. 1, pp. 63-74, 1 Jan.-March 2017. doi: 10.1109/TOH.2016.2598751 URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7539397&isnumber=7880727
Brief description of planned purchases	
Solution description	