**CSM117 Project Proposal**

1. **Team Name, Members, Emails**
   1. Team Name
      1. The Procrastinators
   2. Members
      1. Nathan Knight
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      4. David Feng
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2. **Motivation**
   1. Our team of six would like to explore the effectiveness and limitations of Bluetooth technology through a simple fun and engaging project of designing a remote controlled car. We will split the project into multiple stages in order to tackle the project in a modular sense. Our project will most likely be implemented using the Arduino and Android platform since there are many resources provided to understand how to use these tools. The objective of this project is to investigate how to translate different command signals sent through bluetooth into changing how the car moves.
3. **Expected Functionality**
   1. The project should have a functioning vehicle that will be controlled with an Android phone and an Arduino via Bluetooth. The vehicle should be able to move forward or backwards as well as turn left or right. For simplicity, the vehicle may end up maneuvering more like a tank than a typical car.
4. **Wireless Technologies Used**
   1. Bluetooth
5. **Implementation Overview**
   1. Build a vehicle
      1. The vehicle should be structurally sound
      2. The vehicle will use two electric motors each connected directly to an individual and opposite wheel
   2. Setting up the Arduino Bluetooth
      1. The Bluetooth module will have to be setup along with implementing the supporting code for Bluetooth connectivity
   3. Setting up the Android phone to communicate with the Arduino Bluetooth
      1. The phone will have to communicate and send control commands to the Arduino
   4. Testing
      1. Make sure that the vehicle can be controlled with the phone
6. **Responsibility Assignment**
   1. Nathan and Harrison
      1. Build vehicle
   2. David and Kate
      1. Setup Arduino Bluetooth
   3. Gwen and Nick
      1. Setup Android
7. **Work Schedule**
   1. Week 6
      1. Vehicle build is completed
   2. Week 7
      1. Android and Arduino can communicate
   3. Week 8
      1. Vehicle controls are functional
   4. Week 9
      1. Report is started
      2. More testing of the vehicle
   5. Week 10 Report is completed and ready for presentation