**Tasks – Group Edit**

* Hello World Robot
  + Learn how to set up Vex
  + Learn how to operate/code in Debian Linux
  + Learn how to program ARM processor
  + Setup Development Environment
  + Program Hello World
  + Record Results?
  + Make Documentation?
* Hello World Tablet
  + Learn how the basics of programming on Android
  + Setup ADT Plugin on Computer/Install Plugin on Eclipse
  + Make sure tablet connects to computer
  + Code Hello World
  + Record Results?
  + Make Documentation?
* Hello World Android
  + Learn how the basics of programming on Android
  + Setup ADT Plugin on Computer/Install Plugin on Eclipse
  + Make sure tablet connects to computer
  + Code Hello World
  + Record Results?
  + Make Documentation?
* Robot, Tablet, and Android Phone are not Damaged
  + Ensure that all devices are either with you in the DLL or in the Locker.
  + Place bumper onto phone
  + Do not drop either
* Robot able to go straight forward, straight backward, turn right and left
  + Look up spec sheets for the motors
  + Build robot
  + Program motors to move
  + Create methods for moving robot forward, backward, left, right
  + Create a GUI that has buttons for each movement (ie. Forward, backward, left, right)
* Obstacle avoidance
  + TODO: What hardware/peripheral do we have for this?
* Communication between Android and Tablet
  + Choose medium, USB vs WIFI vs Bluetooth
  + Learn to use this form of communication on Android
  + Learn for Tablet
  + Send variety of test traffic to test connection
* Communication between Tablet and Vex
  + Choose medium, USB vs WIFI vs Bluetooth
  + Learn to use this form of communication on Vex
  + Learn for Tablet (may done this in previous task)
  + Send variety of test traffic to test connection
* Robot can handle 10% grade
  + Dependency task: Robot can move forward/turn/etc
  + Dependency task: GUI for robot movement control
  + Implement an efficient motor control algorithm
  + Test on 10% grade
* Remote control using Vex radio
* Remote emergency stop mechanism
  + Discuss high level implementation
    - Easy: program stop button on GUI that sends a signal to pull the power from Vex
    - Medium: stop without pulling power so robot can be turned back on remotely
    - Hard: Vex constantly searching for acknowledgement signal NOT to stop, and will emergency stop if signal not received
    - Other ideas?
  + Write communication implementation code for the form of communication chosen to use between Phone/Tablet and Vex