SCHEDULE

Week One (15 hours)

i. Remote connection to the iRobot Create with ADHOC WiFI connection (10 hours)
    a. Setup ADHOC WiFi in the laptop (2 hour)
    b. Connect myRIO to the computer using WiFi (3 hours)
    c. Continuously report connection status (2 hours)
    d. Testing and debugging the connection (3 hours)

ii. Invent and implement a communication protocol (TCP like) (5 hours)
    a. Create command list of interest (1 hour)
    b. Design command representation in the protocol (2 hours)
    c. Design status report data structures (2 hours)

Week Two (15 hours)

i. Implement manual navigation of the robot (15 hours)
    a. Implement sending of each command to the robot (10 hours)
    b. Implement polling of robot status (5 hours)

Week Three (15 hours)

i. Report robot status (all readings) (7 hours)
    a. Implement polling of status readings (2 hours)
    b. Implement sending of status readings over the WiFi (5 hours)
ii. Implement automatic navigation that overrides bad user decisions (8 hours)

Week Four (15 hours)

i. Try (report an error if this is impossible) to automatically move to a given relative coordinate with respect to compass measurements (15 hours)
    a. Implement obstacle avoidance algorithms (7 hours)
    b. Implement target seeking (8 hours)

Week Five (15 hours)

i. Integration testing and debugging (15 hours)

Week Six (15 hours)

i. Delivering presentations and final reports (15 hours)
    a. Presentation and Demo (5 hours)
    b. Final Report writing (10 hours)