MILESTONES

Week One

Goals:

    i.   Remote connection to the iRobot Create with ADHOC WiFI connection
    ii.   Invent and implement a communication protocol (TCP like)

Deliverables:

    i.   LabVIEW interface implementing WiFi connection status (Online/Offline) indication

Week Two

Goals:

    i.   Implement manual navigation of the robot

Deliverables:

    i.   LabVIEW interface to send commands to the robot
    ii.   Robot responding to navigation commands (e.g. move, turn, stop)

Week Three

Goals:

    i.   Report robot status (all readings)
    ii.   Implement automatic navigation that overrides bad user decisions

Deliverables:

    i.   LabVIEW interface that repots robot status
    ii.   Robot overriding bad user commands (e.g. move when the robot reaches the edge of a cliff)

Week Four

Goals:

    i.   Try (report an error if this is impossible) to automatically move to a given relative coordinate with respect to compass measurements

Deliverables:

    i.   Automatically move to a target coordinate

Week Five

Goals:

    i.   Integration testing and debugging

Deliverables:

    i.   Working prototype meeting the specifications

Week Six

Goals:

    i.   Delivering presentations and final reports

Deliverables:

    ii.   Final presentation and report (4,000 – 5,000 words report)