# **Requirements Presentation**

Team 7 - New Millennium Innovation Matthew Miller, Quincy Ahuja, Abdulrahman Alzimam, Siqi Peng

- 1. The machine must be able to write on the whiteboard
  - 1.1 The robot must not make too much noise while writing
    - 1.1.1 The robot may make slightly more noise than a whisper so the dB noise output of the system must be below 40 dB
  - 1.2 Needs controllable marker placement that the user can specify
    - 1.2.1 The robot must control marker location within an acceptable error of less than 1 cm in either direction

- 2. The machine must be able to erase the whiteboard
  - 2.1 Must be able to erase specific areas not just all of it at once

- 3. The machine must be able to scan and save the whiteboard
  - 3.1 Scan must not capture surroundings of the white board.

- 4. All functions must be accessible remotely to the client
  - 4.1 A stable preferably ethernet connection

- 5. The power supply for the robot must be capable of doing AC-DC conversion
  - 5.1 The power supply must plug directly into the outlet
    - 5.1.1 All connections must be covered for safety purposes

### **Other Requirements**

- 6. The machine must not get in the way of someone trying to locally access the whiteboard
- 7. The cost of developing the machine must not exceed \$500
- 8. The machine must compatible with multiple size whiteboards