# Information Assessment

## Requirements:

1. Platform controller must be a student’s HCS12 board from previous semester.
2. Platform link shall be a commercial Linux box. Uses Rs232 to communicate with platform controller.
3. Platform supervisor shall be a desktop PC running Linux or Windows and be controller using keyboard commands or a USB controller.
4. PID controller to enable closed loop speed control.
5. Document communication protocol for how the platform controller receives commands. And for how the Linux Box communicates with the platform supervisor / controller.
6. Ability to monitor the sensors from the platform supervisor using Wi-Fi.
7. Use the current triangle robot mechanism and the power connection to the platform is the only allowed wired connection.
8. Platform operations has to work with asynchronous commands.
9. Sensors and power details for the environmental logger will be fill researched next week.
10. Platform robot shall be able to move from a starting location using PID control, search for environmental logger and transfer data to the platform supervisor.
11. Code must be managed by some form of version control software.
12. Students must complete the project in the 10 weeks of allotted time.

## Missing Information

1. More information is required about the Environmental logger and the available sensors for use.
2. Need to research Wi-Fi capabilities and plan how the environmental logger is going to be detected.
3. Need more specifications on what is required for the Linux box other than Rs232 and Wi-Fi.

## Technical Risks

1. Version control could break and we lose all our code.
2. Board could break because of an electrical failure.
3. Linux box could be incompatible with our current code or it could have trouble communicating to our board.
4. Wi-Fi communication might not be compatible with our current communication protocol.
5. Streaming video over the Wi-Fi connection could be too slow or the amount of information required to be sent is too large.