

Group Number: Dec14-02 - Android Bridge

Client: Vermeer Corp.

Advisor: Somani/Celik

Members:

Alec Johanson - Lead

Ahmad Muaz Mohd Khairi - Thinker lead/Communication

John Shelley - Webmaster

Attendance At Meetings:

Name	Meeting 1 (2/13/2014)	Meeting 2 (2/16/2014)
Alec Johanson	Not Present	2 hours
Ahmad Muaz Mohd Khairi	1 hour	2 hours
John Shelley	1 hour	2 hours

Accomplishments:

2/13/14

- discuss on what we had researched in a week
- learned more about how vermeer works, and break any previous conceptions on how the canbus implementation itself.

2/16/14

- Received news that the CAN Bus was available to pickup
- Create Project Plan Template
- Assign Project Plan Responsibilities
- Begin to fill out project plan
- Formulate Questions for Nathan
- Find workable meeting times with Nathan
- Research CAN communication options
- Add Trello Cards
- Access website
- plan to document how to access website (sftp)
- Complete Weekly report

Plan:

2/13/14

Research on:

- What standard should we use - (ODBII, etc) (especially for security reasons)

- Raspberry Pi, Gumstick, etc - What microprocessor should we use
- What network connection will we be using? - TCP, UCP, etc
- Look up, Vector CAN Interface, CANLIZER

2/16/14

- Alec - Find what CAN protocol used.
- Alec - Write up problem statement
- All - Create concept sketch
- All - Create System Block Diagram
- John - Compile System Description
- Ahmad - Describe the operating environment
- John - Create UI Description
- All - Contribute to Functional Requirements
- All - Contribute to non-functional requirements
- All - Market and Literature Survey
- All - Compile list of Deliverables
- All - Formulate Work Plan

Pending Issues:

- Unsure on whether to implement CAN interpreter or VT Systems Interpreter: Currently we had thought we needed to implement hardware to interpret the CANbus and then relay those out to the Android device, however after looking at the recent emails, our client may want the current model to only be revised to allow the android to grab what the isobus vt system already knows, as to not reinvent the wheel.

Individual Contributions:

Alec - Continue reading book on CAN. Research CAN libs online. Working with group members filling out/setting up documents. Completed the homework 1 assignment. Arranged to pick up hardware from the research park. Requested room access to the lab.

John - Attended both meetings for 3 hours total. Completed the homework. Applied for Key Card access to lab. Researched quite a bit about Android connecting with CAN bus. Found ODBII To be very common and completely used in automobiles and thus many interfaces have been made. Started looking into Android Design's that will benefit the safety of the employees more than making sure it is aesthetically pleasing. Also looked into specific hardware that can communicate with and android tablet such as arduino, raspberry pi, and gumstick. Still looking into specific security issues when dealing with different network connections such as: TCP, UDP, HTTP, etc

Ahmad- Reading about ISOBUS, VT and the microcontroller that maybe will be using for this project. Request room access for lab to work on project. Completed homework 1. Researching on Vermeer competitor product such as Caterpillar.

Hourly Contributions:

	week 4	cumulative
Alec Johanson	5.5	13.5
Ahmad Muaz Mohd Khairi	6.5	12
John Shelley	6.5	12.5