



# Vehicle Intersection Control

McMASTER UNIVERSITY

Development Process and Implementation

SE 4G06

GROUP 6

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## 1 Revisions

Date	Revision Number	Authors	Comments
October 22, 2016	Revision 0	Alex Jackson Jean Lucas Ferreira Justin Kapinski Matthew Hober Radhika Sharma Zachary Bazen	-

Table 1: Table of Revisions

## **2 Overall Process Workflow**

### **2.1 Project Steps and Order**

Very highlevel (Jean) (note: sd = soft deadline)

1. Acquire 1 (or 2) 1/10th car models (sd: mid November)
2. Acquire hardware (rasberry Pi, camera(s), sensors ) for each car to allow automation (sd: end of November)
3. Integrate car models with hardware (sd: early december)
4. Look for open-source algorithms for lane-following and apply to cars (mid december)
5. Cars can follow lanes independently (sd: end of december)
6. Algorithm considerations and design planning
7. Test algorithms virtually (via simulations) (sd: end january)
8. Implement algorithm to the car software
9. test test test (end of february)
10. freak out
11. ???
12. graduate :D

### **2.2 Step Inputs and Outputs**

Insert Text Here.

### **2.3 Step Output Acceptance Criterion**

Insert Text Here.

## **3 Step Completion Information**

### **3.1 Tools and Versions**

Insert Text Here.

### **3.2 Tool Setting and Use**

Insert Text Here.

### **3.3 Standards**

Insert Text Here.

### **3.4 Work Assignments**

Ideally we should create two subgroups (HW and SW), but we would still discuss both aspects as a whole group. When it comes to implementation subgroups might be more efficient.

## **4 Version Control Information**

GitHub Ideally **two** repos:

- documentation and miscellaneous stuff
- source code, libraries, and dependencies.

## **5 Project Evolution**

### **5.1 Bug and Change Tracking**

Any issues with the project (ie: bugs) will be posted on github via the Issues panel. When a issue is posted, someone may take responsibility to fixing the bug. Once fixed, the issue will be closed.

### **5.2 Project Change Documentation**

Github <3

### **5.3 Project Change Classification**

Github does it for us??

### **5.4 Making Project Change Decisions?**

Insert Text Here.