

## Are We There Yet: Sprint 4 Postmortem

### **Planning Meeting**

During the planning meeting, we constructed a back log based upon what task each group member would be working on.

Task	Owner
Object detection with camera	Brian P.
Line following robot	Alex
Etch-A-Sketch	Michael
Arm articulation and attachment pick up	Brian S.

- We discussed how we need to make sure that we are always submitting our best work.
- We discussed how we met our commitments and the commitments that we failed to meet.
- We discussed what each member would be prototyping and the fashion in which these prototypes would be completed.

## Stand up logs

Date	Meeting Highlights
10/16	<ul style="list-style-type: none"> <li>• Sprint planning</li> <li>• Responsible for: <ul style="list-style-type: none"> <li>• Alex: Line following system</li> <li>• Brian P.: Object detection with camera</li> <li>• Brian S. : Arm articulation and attachment pick up</li> <li>• Michael: Etch-A-Sketch</li> </ul> </li> </ul>
10/21	<p>New:</p> <ul style="list-style-type: none"> <li>• Michael: Waiting on computer to be fixed</li> <li>• Alex: Basic software completed for QRE1113s</li> <li>• Brian S: Haven't gotten in motors</li> <li>• Brian P. : OpenCV research</li> </ul> <p>Issues:</p> <ul style="list-style-type: none"> <li>• Brian P.: Haar training and cascade classifications are not the way to approach object detection</li> </ul> <p>For next meeting:</p> <ul style="list-style-type: none"> <li>• Brian P. : look into color and saturation detection to see how well that will work for detection</li> </ul>
10/23	<p>New:</p> <ul style="list-style-type: none"> <li>• Michael: looking into free Etch-A-Sketch simulator</li> <li>• Alex : Parts are in</li> <li>• Brian S. :Parts are in</li> <li>• Brian P: Primitive object recognition</li> </ul> <p>Issues:</p> <ul style="list-style-type: none"> <li>• Brian P.: needs to detect objects more reliably.</li> <li>• Michael: serial communication between Arduino and python</li> </ul> <p>For next meeting:</p> <ul style="list-style-type: none"> <li>• Brian P.: look into contours and areas of objects detected</li> </ul>

## **What Went Well**

The prototypes that were completed for Sprint 4 went well. They fulfilled a large chunk of our requirements and proved that we are on the right track for our ideas.

## **What Could Use Improvement**

During Sprint 4, we lost a lot of time due to not adhering to our schedule and commitments. Looking ahead to Sprint 5, we'll need to be more diligent in making sure that we make all of our commitments and that we adhere to the revised schedule.

Coinciding with commitments and scheduling are work ethics. Although we were given two weeks to work on developing our prototype and determining where our design would fail, we did not fully start work until the weekend before the parts were due. This ended up harming us in the long run as we now have a lot of ground to make up. Looking ahead, we need to regain lost time by making sure we take care of tasks well before they are due.

## **Our Commitments This Next Sprint**

During the next sprint, we will be working towards accomplishing the tasks we did not achieve during sprint 4. Additionally, we need to get our work standards back up to where they were at the beginning of the semester. As other classes begin to get more involved, we need to make sure that we are still committing enough time to senior design.

If we've run into problems with our projects, we need to be better about asking for help and or technical advice. Since we all come from different majors, we have a very wide skillset that we can exploit to get our tasks done better and more cooperatively.

## **Retrospective**

For Sprint 4, we did not meet most of the commitments we proposed in Sprint 3. Most of our prototypes did not turn out as planned, which is why we now find ourselves playing "catch-up". Additionally, we did not communicate very effectively, if at all, during Sprint 4. The main reason behind this is that most of the prototypes were started so late in the process that at our stand-up meetings, some of our group members never had much to comment on. In turn, stand ups became less frequent since no progress had been made. This lead to a communications breakdown. There are a lot of ways in which Sprint 4 needs to become a rejuvenation sprint for our team. If we continue down the path we have started down, it's very likely that we will not meet our projected deadlines.