

Team Copy-Waste
Nolan Flegel, Rishabh Prasad, William Peers
Team / Instructor Scrum - 3
Oct. 8, 2021 - Oct. 22, 2021

Team Member Roles:

- Nolan Flegel - Machine Learning Lead
- Rishabh Prasad - Front-End Services Lead
- William Peers - Back-End Services Lead

Business Needs:

- Our business need is to reduce risk and cost to municipalities and waste management employees. As recycling rates increase, the events are a growing concern. An event that happened on Wednesday, at a recycling facility in Regina, emergency services responded to a fire, presumed to be caused by batteries in the recycling stream.
 - On April 8th, 2021 there was a fire at crown shred and recycling. Firefighters were able to prevent the fire from entering the main building.
 - Wednesday of last week, Oct 7th, there was a fire at the Emterra facility that took Firefighters more than 3 hours to extinguish.

Status: Green

- We are gathering requirements extensively, meeting often, and recording meeting minutes with our scheduled weekly sprints

Individual Contributions:

- **Nolan**
 - Project Documentation, Research into Yolo and variants, collecting true negative image datasets
- **Rishabh**
 - Project Documentation, Green Screen Community Documentation, Activity Based Planning, High and Low Fidelity Prototypes
- **Will**
 - Collecting True Negative image datasets, Project Documentation

Project Issues / Changes:

- No issues or changes at this time

Documentation and Overview:

- Exhaustive research on industry needs and technologies to accomplish them
- False positive recycling bin images are being collected and sorted (blue billboards, blue vehicles, portable restroom, blue bin far, black bin far, etc)
- Dashboard is prototyped based on research
- Trello board is being actively used

- Meeting minutes are being noted at the end of every weekly sprint
- Mitacs Proposal is being finalized

Next Up:

- **Team**
 - Meetings planned with our Advisors and with Prairie Robotics
 - Submitting Mitacs Proposal
 - Completing remaining project startup documentation
- **Nolan**
 - Write script to parse images, run classifier, start manually annotating images.
- **Rishabh**
 - Build project architecture within React
 - Integrate our dashboard successfully with Prairie Robotics technology
- **Will**
 - Run classifier, begin annotating images

Team Reflection:

- **Does the team feel "on track"?**
 - We believe we are still on track, time management has been a challenge. The next two week have quite a few tasks outside of the capstone.
- **What progress does the team particularly feel good (great) about?**
 - Lots of Conversations
 - Our Research
 - Better Understanding of Business Needs
- **What barriers (if any) does the team feel are a current impediment to success?**
 - The Mitacs Proposal is still being reviewed and completed by Prairie Robotics. We are still awaiting feedback before it can be submitted.
- **What help (if any) does the team require to move positively forward?**
 - Review Project Initialization documents with stakeholders to ensure our visions are aligned
- **What questions or concerns does the team have (if any)?**
 - Processing Power of edge device which is on the trucks