# Team Copy-Waste

### Nolan Flegel, Rishabh Prasad, William Peers

Team / Instructor Scrum - 6

Feb.8, 2022 - Feb.15, 2022

# **Team Member (Re)introductions**

- Nolan Machine Learning Lead
- Will Back-End Services Lead
- Rishabh Front-End Services Lead

#### **Vision**

Our project has two objectives; reduce risks to the public, waste management employees and facilities and reduce the cost to municipalities and waste management companies caused by rare and severe contaminants in recycling waste collection.

#### **Mission**

We strive to achieve our vision by automating the detection of severe and rare contaminants in the recycling stream

# **Business Need**

Our business need, to reiterate, is to reduce risk and cost to municipalities and waste management employees. As recycling rates increase, contamination and risk becomes a growing concern.

# **Current Status: Green**

# **Project Issues / Changes**

No issues or changes within this sprint

# **Individual Contributions (Feb 08 - Feb 15):**

#### Nolan:

- Auditing 30,000 images of Transparent Plastic
- Code Reviews

### Rishabh:

- Auditing 30,000 Clamshell Packaging annotations
- Started Multiple Object Placement

Code Reviews

# Will:

- Auditing 30,000 Grocery Bag annotations
- Code Reviews

#### Simple Copy-Paste Overview

Over the past week we have been tasked with auditing 30,000 annotations each. As you can see all we needed to do was click on each image which contains inaccurate annotations and then press space bar to view the next set of images. Many of these annotations were found to be too small, containing the wrong object, too dark, or too blurry. All of these inaccuracies contribute to hindering the performance of detection models created through our copy paste pipeline.

#### Next up

#### Team

- Meeting with Mitacs Mentors
- Begin Dashboard User Testing
- Completing Layering Transformations for MVP 4
- Start working towards scaling up our augmentation prototype for MVP 5

#### Rishabh

Continue to work on pasting multiple objects, as well as complete User Acceptance
Testing

### Nolan

- Working on smoothing out our polygon objects, then creating a function that clips any overlapping polygons.

# Will

Layering Existing Annotations which builds on placing multiple objects

# **Team Reflection**

- Does the team feel "on track"? (reiterate the above colour status)
  - We believe we are still on track
- What progress does the team particularly feel good (great) about?
  - We finished auditing 30,000 images each, approximately 1700 images /hour.
  - 90,000 thousand images = ~53 hours of auditing. This was a time consuming process and we feel great to be finished with that.
- What barriers (if any) does the team feel is a current impediment to success?
  - None at this time
- What help (if any) does the team require to move positively forward?
  - None at this time

- What questions or concerns does the team have (if any)?
  - o No concerns at this time